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A CROSS SECTIONAL ANALYSIS OF WORK RELATED ISSUES IN OCCUPATIONAL THERAPY

BY

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A THESIS
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February 15, 1985

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Dear Dr. ~~Madill~~: Helen

Please excuse my delay in responding to your request for permission to reproduce diagrams which I had included in my article on the work importance study.

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Further to our joint preparation on May 30, I have sent my résumé to Mary Lou Boudreau. Attached is a draft outline for the first part of the session. Perhaps you could respond to it by telephone. I have adopted (subject to discussion with you) the framework of the Life-Career Rainbow because it offers a simple explanation and method of condensing a great deal of information in a short time. I am assembling information but everything is still pre-draft stage.

Yours sincerely,

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "A Cross Sectional Analysis of Work Related Issues in Occupational Therapy" submitted by Helen Marina Madill in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Educational Psychology.

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DEDICATION

In loving memory of Francis Anne Laxen (1921-1983),
whose enthusiasm and courage remain as a lasting example
to her eldest niece.

ABSTRACT

A national survey of occupational therapists (N=1400) in Canada was undertaken to provide a foundation for a career pattern study in this occupational group. Respondents were female (96%), married (65%), between 25-44 years (80%), employed in staff therapy positions (49%), who reported a baccalaureate degree as their highest academic credential (68%). Two vocationally related inventories (Life Roles Inventory and Vocational Preference Inventories) and one satisfaction questionnaire (Minnesota Satisfaction Questionnaire) were used to examine work related issues in occupational therapy.

Three classification variables were used in this descriptive study -- age, position, and educational level. Respondents in this study consistently, highly endorsed the same values regardless of age or position level (personal development, ability utilization, social relations, altruism, autonomy, and achievement). The level of work salience (importance) was high across the total sample, with the home/family role registering as the most important role for the majority of respondents. The level of job satisfaction on the general satisfaction scale was moderate, with the intrinsic elements accounting for a greater source of satisfaction than the extrinsic elements. Both age and educational level appear to be associated with any differences that were observed between groups.

The findings are generally supportive of the three theoretical positions used, those of Super, Holland, and Lofquist & Dawis, but cast some doubt upon Holland's typology and the method used to obtain a Holland Code for an occupational group. On the basis of the Vocational

Preference Inventory, the existing Holland Code (S-R-E) was exhibited by only two respondents. While a great diversity of vocational interest patterns was evident, a Holland Code based upon the social, artistic, and intellectual scales is the most appropriate classification for this occupational group.

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Professional Corporation of Occupational Therapists of Quebec
Prince Edward Island Society of Occupational Therapists
New Brunswick Society of Occupational Therapists
Newfoundland & Labrador Association of Occupational Therapists
Nova Scotia Society of Occupational Therapists

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CHAPTER I

STATEMENT OF THE PROBLEM

Issues associated with career development for women are receiving increased attention in the literature (Baruch, Barnett, and Rivers, 1983; Osipow, 1983; Agassi, 1982; Bernardin, 1982; Montross & Shinkman, 1981; Canadian Mental Health Association, 1984). Opposing opinions about the degree of similarity between men's and women's career development have been presented and in the absence of other models those pertaining to men have been applied to both sexes. Osipow (1983) has stated that "so much social change is occurring in the area of sex and vocation that any theoretical proposal made now is likely to be premature, as would be any generalization about womens' career development" (p. 271). What appears to be needed is empirical data about career patterns for specific occupational groups, which may facilitate the formulation of a career development theory for women.

One of the major issues supporting the formulation of a separate career development theory for women is the demand from multiple roles. For the majority of working women multiple roles are the rule rather than the exception. The degree to which these role functions influence career development has yet to be determined.

Super (1983) and associates (representatives from 14 contributing countries) have developed a Life Roles Inventory (LRI) to measure the values, participation, and commitment of an individual to studying, working, community service, home/family, and leisure activities. This instrument can therefore be used to determine what factors are of primary importance to the individual when work is placed in the context of other life tasks. It may provide useful data relating to multiple role functions. Normative data for the LRI from occupational groups in Canada is currently being sought by the Employment Support Services Branch of the Canada Employment and Immigration Commission.

In 1978 the International Congress of Applied Psychology began to consider the issues surrounding work values and work salience (importance). Plans were made to develop and test instruments to measure these constructs. The International Work Importance Study developed with the major objective of identifying the meaning of work in the lives of residents of industrialized nations. Canada's Work Importance Study is part of this international project (Casserly, 1982).

At the Summer 1982 meeting of the International Congress plans were made for national studies, Canada's goal being to administer the Life Roles Inventory "to a representative sample of the Canadian population between the ages of 15 and 65" (Casserly, 1982, p. 129).

Under the chairmanship of Dr. Donald Super the Life Roles Inventory was developed. It was given a major field trial in Canada during 1981, refined, and a second trial was conducted in the spring of 1982. The data from the preliminary study of Alberta occupational therapists contributed to the latter (Madill, Brintnell, Stewin, Fitzsimmons & Macnab, 1985).

Vocational choice and career development issues appear to be closely related. Holland's (1973) theory of vocational choice suggests that vocational satisfaction, stability, and achievement depend upon the degree of congruence between elements within the work environment and the worker's personality.

Holland claims that people can be categorized according to their personality types as represented by their interest patterns. To measure these patterns, he developed the Vocational Preference Inventory (1965) from which he identified six categories: realistic, investigative, artistic, social, enterprising, and conventional. This typology formed the basis for generating a Holland Code -- a code which is used extensively in vocational guidance and counselling.

In Canada, Holland Codes have been assigned to each occupation listed within the Canadian Classification Dictionary of Occupations (CCDO), and three methods of code assignment were reported. Holland Codes for the occupations contained in the Vocational Preference Inventory were used for identical Canadian occupations. They also were used as "benchmarks" for assigning codes to similar occupational environments. "The remaining occupations were assigned codes according to Holland's environmental models" (Employment & Immigration Canada, p. i).

Roberts (1982), discussing the CCDO, noted that one of the problems was that "classification structures are themselves intellectual constructs not derived from empirical data (Holland's being a possible exception)" (p. 172-3). From a preliminary provincial study of Alberta occupational therapists (Madill, Brintnell, & Stewin, 1983) it appears that the assigned code for this occupational group is not accurate. Therefore the validity of the existing code is in question.

Occupational therapy (defined in Appendix A) providedda model of a female-dominated profession that is typical of a number of allied health occupations. The number of therapists in Canada did not exceed 3000, making it possible to study the population as opposed to a representative sample. This occupational group, therefore, provided an ideal profession for a career pattern study.

Career development theories for women are still in their infancy

(Osipow, 1983, 1975; Vetter, 1978) and it has yet to be determined if existing theoretical perspectives relating to men are being inappropriately applied to women (Baruch, Barnett, & Rivers, 1983; Osipow, 1983). Data from a population such as the one provided by occupational therapy is seen as a contribution to the formulation of career development theory for women.

A study by Maxwell and Maxwell (1977) is the only previous national survey of occupational therapy in Canada. The primary focus of this study was on issues relating to the provision of occupational therapy service by different levels of personnel. However, data also were reported on general professional and work-related issues. The Maxwells' study therefore provides a profile of the occupational therapy profession as it was seven years ago, making it possible to evaluate new data against a baseline. A major descriptive study of the characteristics of occupational therapists in the USA was undertaken by Jantzen (1970), and the Human Resources Project (Acquaviva, 1975) provided additional information about occupational therapy manpower in the United States. No such studies have been reported in the Canadian or the American occupational therapy literature during the 80's. However, editorials and articles dealing with philosophical and theoretical issues point to the influence of changing societal values and major technological developments on the profession and its service providers. Such material includes Mathewson (1975), Gilligan (1979), Johnson (1973, 1977, 1981), Hightower-Vandamm (1980, 1982), Bing (1983), and Teske and Spelbring (1983).

A study using the population of occupational therapists in Canada was undertaken, with three major objectives:

1. To develop a foundation for the study of career patterns in

occupational therapy by initially identifying the level of importance that therapists attach to five major life roles (studying, working, home/family, community service, and leisure).

2. To identify the level of job satisfaction reported by occupational therapists.

3. To determine the accuracy of the assigned Holland Code for occupational therapy.

The implications for such a study go beyond the professional concerns of Canadian occupational therapists. Holland's typology is widely used in vocational evaluation, and inaccurate codes may contribute to inappropriate recommendations, disillusioned students, frustrated practitioners, and wasted educational resources.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

The review is limited to the three major areas of importance to this descriptive study: vocational choice, career development, and job satisfaction. This thesis is concerned with the career patterns of an occupational group, a female-dominated profession: occupational therapy. A cross sectional analysis of the professional group is the focus of the study. Due to the descriptive nature of the study and the limited baseline data of an historical nature that is available, it is considered premature to consider general issues (such as legal rights, sexual discrimination, salary differentials, and women's rights) in relation to this occupational group at this stage.

The theoretical frameworks of Donald E. Super and John L. Holland have sufficient congruence for both to be applicable to the study. Three areas are common to the basic premises of these theorists:

1. People: both address individual differences, Super from the developmental viewpoint and Holland from the personality trait viewpoint.

2. Occupation: each theory acknowledges differences in occupational environments.

3. Interaction: both recognize the effects on the individual of an appropriate occupational choice -- Super refers to "implemented self-concepts", and Holland to "congruence between personality and work environments."

Work in its broadest sense could be defined as a "goal-directed expenditure of energy" and as such it involves everyone. It has great personal and social significance, it establishes patterns of activity and social interaction, and imposes a schedule or timetable on people's lives. Work contributes to an individual's identity and self-esteem. The type of work that people perform contributes significantly to their social standing, neighborhood, friends, leisure activities, and their role in the community (Stromberg & Harkess, 1978).

However, for the purposes of this descriptive study work is defined as "what you do to make money or profits, either on a job or for yourself" (Super & Associates, 1983a, p. 6). Although homemaking is often considered as "work" it should be noted that this activity is measured separately on the Life Roles Inventory.

Values and Vocational Choice

Vocational choice has taken on a wider perspective: it was recently referred to as a "career/life planning process" (Briggs, 1981, p. 196). Briggs has outlined three basic elements within the process: "gathering, organizing and analyzing information about self", going through the same process in relation to work, and finally "goal setting" (pp. 196-97). He advocates that the self-assessment must include a "clarification of values and the recognition of personal interests" (p. 196), values and interests being central to this part of the process.

In the psychological literature, consideration of values began in the 1930's and appears to have reached its height during the 1950's and 1960's. The works of Kluckhohn (1954), Allport, Vernon, and Lindzey (1960), Maslow (1959), Hartman (1959), Margenau (1959), and Rokeach (1968) are cited throughout the literature. Dukes (1955) reviewed the psychological studies of values from the 1930's through 1955. He found that these studies were generally concerned with measurement of the values held by groups and differences between groups, developmental issues pertaining to the values held by the individual and the influence of such values on cognition (p. 24).

Definition of the term has posed a continual problem. Values have been considered as attitudes, motivations, objects, affect laden customs or traditions (Kluckhohn, 1954), and the term has also been used interchangeably with interest, motive, need, sentiment, and valence (Dukes, 1955). Rokeach (1968) considered a value to be a personal disposition (p. 124) with "a strong motivational component as well as cognitive, affective and behavioral components...value is a determinant of attitudes as well as behavior" (p. 157). Once a value is internalized Rokeach considers that it becomes "a standard or criterion for guiding action" (p. 160). He introduced the concept of a value system, defining this system as "a learned organization of rules for making choices and for resolving conflicts -- between two or more modes of behavior or between two or more end states of existence" (p. 161).

Attitudes could be defined as positive or negative beliefs organized around an object or situation. Rokeach considers that attitudes also have cognitive, affective and behavioral components. Katz (1960) described four functions of an attitude, one being a value-expressive function, supporting Rokeach's premise that values determine attitudes. From this perspective values are closely linked to the development of the self concept.

Rescher (1969) considers values to be "rooted in the fact that man is a goal-oriented organism seeking to achieve satisfaction and avoid dissatisfaction" (p. 9). One of the ways that man seeks to achieve satisfaction is through his vocational pursuits, a concept which is supported by both Holland and Super's theoretical positions. Hinrichs' (1970) literature review pertaining to industrial psychology in the 1960's states that "research into the developmental aspects of work values and needs could have important ramifications for manpower selection and placement and for effective utilization of manpower" (p. 536).

The stability of values and the issue of value change is of concern. Rescher (1969) states that "values, though no means totally unresponsive to environmental changes, are generally not highly sensitive to them" (p. 118). He describes value change as an "evolutionary" (as opposed to a "revolutionary") process. Osipow (1983) concluded after reviewing the literature that "changes in occupational values over time suggest that such values are generally stable for individuals, though subject to some change over time" (p. 68).

Despite its evolutionary nature, value change appears to be a dynamic process. Rescher (1969) describes a process of "value acquisition", where the individual subscribes to a value that was not previously held, and "value abandonment" when the reverse of this process occurs. Value change may be a direct result of a change in information, purely cognitive, for example as a result of a scientific discovery. It may also be indirect when it is induced by ideological or political change. Rescher describes the causal factor as "value indoctrination". He also described "value erosion induced by boredom, disillusionment and reaction " (p. 117). Here Rescher's description related to societal values that are downgraded by disenchantment and disillusionment. It is possible that an erosion of individual values could also play a part in "burnout", a term commonly used to describe the stress related demands on personnel, particularly in front line human service occupations.

Two studies focusing on "interpersonal values" in allied health occupations were located. A study of licenced physical therapists in Missouri (Browning, 1980) reported significant differences in values when the level of professional responsibility was also considered. Therapists involved in direct patient care valued support more highly than did those in administrative positions, who gave higher priority to leadership. Therapists who were satisfied with their jobs valued conformity and benevolence more highly than did those who were dissatisfied. This group gave leadership a higher rating.

Similar findings were reported by Oliver (1978) with certified medical technologists. Altruistic values, conformity, and benevolence were more highly rated by satisfied technologists. Dissatisfied workers valued independence more highly. Different values were demonstrated by front line and supervisory level technologists. Front line staff valued support and benevolence more highly, while a higher value for leadership is reported by supervisors. Oliver suggests that "interpersonal values" had a significant influence on the responsibilities an individual seeks and the level of job satisfaction that is experienced. Those technologists who valued independence and recognition generally tended to be less satisfied with their jobs.

O'Toole's (1982) extensive review of literature pertaining to organizational behavior demonstrated how the idea of a universal pattern of work values common amongst workers in industrialized societies has led to erroneous conclusions. When data from the mid-1970's were analyzed according to "such characterics as age, sex, race, occupation, income, place of residence and educational attainment" (p. 230), some marked differences were noted. The work values held by members of the postwar baby boom era were more negative: "entitlementarianism, narcissism and irresponsiblity" (p. 230) were noted.

The younger workers are more concerned about their social and psychological rights. Yankelowich (1978) stated that the "nontraditionalists" are a growing group within the American work force. The loyalty, motivation, and commitment to the job that has been associated with the "traditionalists", the more conservative group, is declining. O'Toole (1982) states that work values may be determined more by experience than age. This concept is also supported by Mortimer and Lorence's (1979) longitudinal study. Those whose work values were affected by the Depression represent the more conservative view. In contrast, the next generation found theirs during a period of economic affluence. "Flexibility, choice, options, variety and diversity" (p. 231) have assumed greater importance. Naisbitt (1984) observed that the members of the baby boom generation transform institutions through which they pass. Primarily well-educated members of the white collar group, these workers are very aware of their rights but "not usually happy on the job, according to many observers" (p. 205).

In their recent report "Work and Well-being, the Changing Realities of Employment" (Canadian Mental Health Association, 1984) generational differences in attitude towards the workplace were also reported (N=1218). Younger new employees "are restless and frustrated about what the workplace has to offer them" (p. 116), whilst older workers, those over 45 years, were less concerned about career goals and advancement and were "less conscious about their workplace involvement" (p. 116), possibly placing greater emphasis on other life roles. It was members of this age group that expressed greater pride in their work.

O'Toole (1982) suggests that the dominant values of young workers may be more appropriate in meeting the challenge of the 80's. "The problem is that the current organization and philosophy of work does not tap the positive values and traits of young workers" (p. 232). The recognition that not all workers are alike, that their values, needs, interests, and motivations change over a career appear to be very important factors.

Burnett (1978) reported from a small survey of young college women that they generally rejected some of the traditional work ethic, placed equal or greater importance on career development than full time family involvement, and chose nontraditional occupations (p. 132).

In summary, the concept of value as it is treated in the psychological literature has been briefly reviewed. Both values and interests are central to self-assessment within the career planning process. The study of values has been complicated by the complexity of definition, classification, and measurement. However, research into the developmental aspects of work values and needs has been advocated. A universal pattern of work values common to workers in industrialized nations does not exist. Super's work, and to a lesser extent Holland's, addresses the issue of values, and a description of these theories follows.

Super's Theoretical Position

Theories of vocational behavior such as Super has proposed take a life span development approach and present the formulation that "occupational choice represents an attempt to implement one's self-concept in an occupation, and that is done by matching one's picture of oneself against one's picture of people in occupations that one knows and in which one is interested" (Super, 1981b, p. 32).

The self concept is a function of the developmental stage: with maturity the self concept becomes stable, which accounts for the differences in the career perspectives or decisions through adolescence and into adulthood. "Super proposes the notion that people strive to implement their self concept by choosing to enter an occupation seen as most likely to permit self expression" (Osipow, 1983, p. 153). Experience is therefore likely to clarify the individual's view of his assets and liabilities, it also serves to increase his knowledge about opportunities and limitations of the job.

Super (1981b) has outlined his developmental self-concept approach in the following twelve propositions:

> Proposition 1. People differ in their abilities, interests, and personalities.
>
> Proposition 2. They are each qualified, by virtue of these characteristics, for a number of occupations.
>
> Proposition 3. Each of these occupations requires a characteristic pattern of abilities, interests, and personality traits, with tolerances wide enough to allow both some variety of occupations for each individual and some variety in each occupation.
>
> Proposition 4. Vocational preferences and competencies, the situations in which people live and work, and hence their self-concepts change with time and experience, although self-concepts are generally fairly stable from late adolescence until late maturity, making choice and adjustment a continuous process.
>
> Proposition 5. This process of change may be summed up in a maxicycle or series of life stages characterized as those of growth, exploration, establishment, maintenance, and decline, and these stages may in turn be subdivided into (a) the fantasy, tentative, and realistic phases of the exploratory stage and (b) the trial and stable phases of the establishment stage. A recycling process takes place in the transition from one stage to the next involving minicycles of new growth, reexploration, and reestablishment; recycling is also attempted each time an unstable or multiple-trial career is unstabilized.
>
> Proposition 6. The nature of the career pattern (that is, the occupational level attained and the sequence, frequency, and duration of trial and stable jobs) is determined by the individual's parental socioeconomic level, mental ability,

> personality characteristics, and by the opportunities to which he or she is exposed.
>
> Proposition 7. Development through the life stages can be guided, partly by facilitating the process of maturation of abilities and interests and partly by aiding in reality testing and in the development of self-concepts.
>
> Proposition 8. The process of career development is essentially that of developing and implementing self-concepts; it is a synthesizing and compromise process in which the self-concept is a product of the interaction of inherited aptitudes, neural and endocrine makeup, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows.
>
> Proposition 9. The process of synthesis of or compromise between individual and social factors, between self-concept and reality, is one of role playing whether the role is played in fantasy, in the counseling interview, or in real life activities such as classes, clubs, parttime work, and entry jobs.
>
> Proposition 10. Work satisfactions and life satisfactions depend upon the extent to which the individual finds adequate outlets for abilities, interests, personality traits, and values; they depend upon establishment in a type of work, a work situation, and a way of life in which he or she can play the kind of role that growth and exploratory experiences have led him or her to consider congenial and appropriate.
>
> Proposition 11. The degree of satisfaction people attain from work is proportionate to the degree to which they have been able to implement self-concepts.
>
> Proposition 12. Work and occupation provide a focus for personality organization for most men and many women, although for some persons this focus is peripheral, incidental, or even nonexistent and other foci such as leisure activities and homemaking are central. (pp. 37-38)

Super (1940) investigated the relationships between vocational and avocational pursuits and demonstrated that work is not the most salient role for a significant number of individuals -- other roles may occupy that position. The possibility that "a successful and satisfying career may be one in which a good balance is struck between roles" was proposed (Super, 1981a, p. 31); role values may vary for different life tasks. Building on this early work and the propositions developed in the basic theory, Super developed the "multidimensional model of work salience, a model in which work is seen as one role which, for real understanding, must be seen in relation to other roles" (Super, 1981a, p. 31). A diagram of the model is presented as Figure 1. Super describes this as a structural model of role salience. The base of the triangle contains the three basic components of role importance, commitment, participation, and knowledge.

Commitment is defined as the affective or attitudinal aspect of importance, the emotional attachment to a role or an expected role. Participation describes the actual activity or the time spent fulfilling a particular role. This differentiation accounts for commitment to role functions that one is not actively involved in and vice versa. Knowledge represents the cognitive component, what the individual knows about a particular role function.

The combination or the interaction of the components on the baseline produce higher level components. Commitment and participation combine to produce involvement, participation and knowledge produce engagement, and commitment and knowledge combine to form interest. Importance subsumes all the components assuming a "concrete operational meaning" (Casserly, 1982).

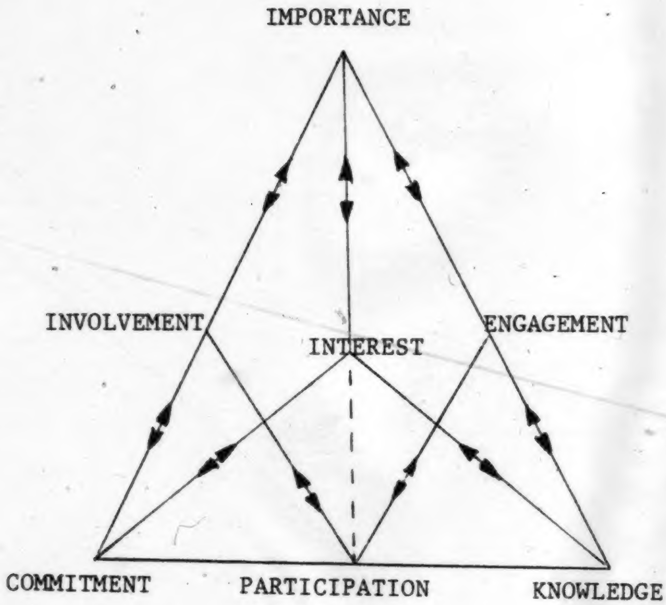
To examine the relative importance of a role to an individual, Super developed a model of role salience (Figure 2). The major roles played by an individual are shown on the graph; in this example the work role is shown as the largest.

A third model is presented in Figure 3 to define "Role-Value Realization" (Super, 1981a, p. 33). An example of the values the individual seeks to fulfill in each of the major life roles is presented.

From this foundation the Life Roles Inventory (LRI) was developed

Figure 1

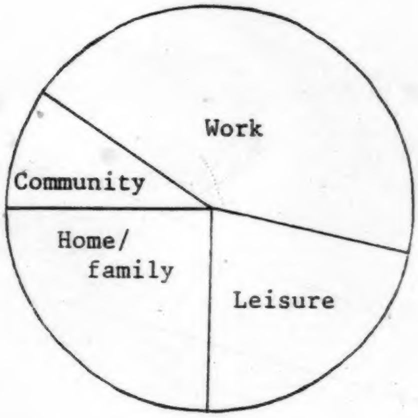
Model of the Importance of Work or Other Life-Career Roles


IMPORTANCE
INVOLVEMENT
INTEREST
ENGAGEMENT
COMMITMENT
PARTICIPATION
KNOWLEDGE

(from Casserly, 1982, p. 128)

Figure 2

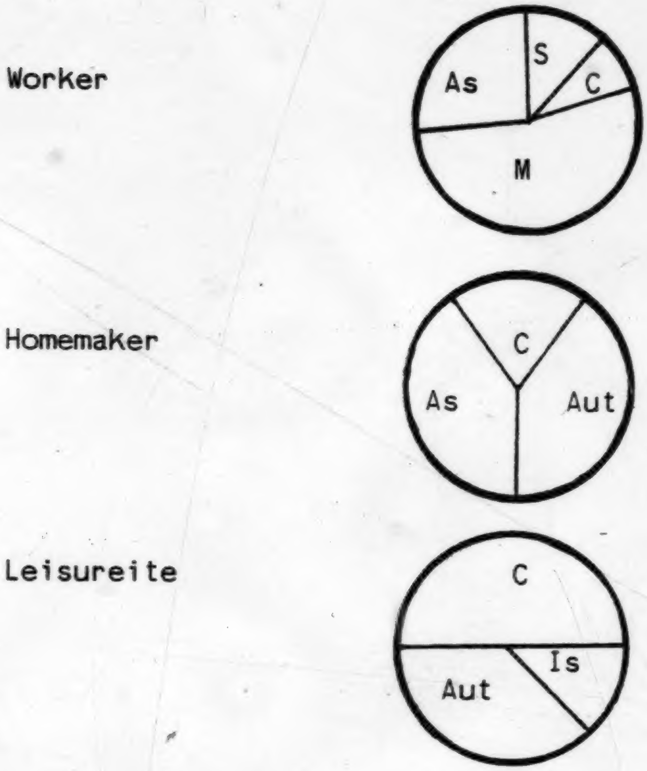
A Model of Role Salience: A Case of Four Roles



(after Super, 1980, p. 33)

FIGURE 3

A MODEL OF ROLE VALUE REALIZATION



Six values in three life-career roles:

As = Associates
C = Creativity
M = Material Rewards
Aut = Autonomy
Is = Intellectual Stimulation
S = Social

(after Super, 1981a, p. 34)

and field-tested by the members of the international project group.

The LRI appears to be an ideal instrument for a career pattern study in a female-dominated profession such as occupational therapy. The models on which the instrument was constructed acknowledge multiple roles, a situation which often provides problems for women in the workforce. The role in which a therapist spends the majority of her time may not coincide with her level of commitment and the LRI will determine the extent to which this situation occurs across the profession.

Holland's Theoretical Perspective

Holland's theory of vocational behavior has been described as a "trait-oriented approach" (Osipow, 1983) or a congruence theory (Super, 1981b). Super has classified the career development approaches and theories into three main categories: matching, developmental, and decision-making. He describes a subcategory within the matching theory perspective as phenomenological, where he places those theories which stress the self-concept and congruence positions. From this perspective, both Holland's and Super's approaches share a common denominator.

Holland's (1973) theory of vocational choice suggests that vocational satisfaction, stability, and achievement depend upon how congruent elements within the work environment are with the worker's personality. He proposed four "working assumptions" as the core of the theory:

> 1. In our culture, most persons can be categorized as one of six types: realistic, investigative, artistic, social, enterprising, or conventional.
>
> 2. There are six kinds of environments: realistic, investigative, artistic, social, enterprising, and conventional.

> 3. People search for environments that will let them exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles.
>
> 4. A person's behavior is determined by an interaction between his personality and the characteristics of his environment. (Holland, 1973, pp. 2-4)

The extent to which an individual resembles each of the six personality types can be assessed with the Vocational Preference Inventory.

Holland has used a hexagonal arrangement or model to represent the arrangement of types according to their degree of similarity. The typology and hexagonal model are presented in Figure 4. From the empirical work supporting this typology, Holland has described the preferences, self perception and values relating to each personality type. His discussion of self perception and values is less extensive than Super's, where these elements are central to that theoretical position. "According to the hexagonal model, the similarity of the types is inversely related to the distance between them...a Realistic person in a Social job is in the most incongruent situation possible; and so on" (Holland, 1981, p. 6). As this describes the situation that occurs with the code assigned to occupational therapy (S-R-E) in the CCDO, the need to investigate its validity receives further support.

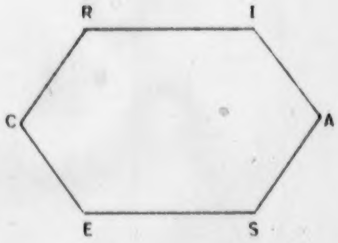
By pairing the individual with the appropriate environment, Holland has demonstrated that the degree to which a person's personality resembles a category "should predict a large portion of his behavior" (1973, p. 24). The theory suggests that personality types develop as a result of the interaction between the individual's inherited potential, activities, interests, competencies, and disposition within the environment (1981). Vocational interests and choice represent "the expression of personality in work, school subjects, hobbies,

FIGURE 4

Holland's Hexagonal Model

REALISTIC
1. explicit, ordered, systematic manipulation of objects, tasks, machines, animals
2. mechanical and athletic ability
3. concrete and tangible money, power,-status

INVESTIGATIVE
1. observational, symbolic, systematic, creative, investigative; drive to understand and control
2. scholarly, intellectually self confident, mathematic and scientific ability
3. science



CONVENTIONAL
1. explicit, ordered, systematic, manipulation of data
2. conforming, orderly, clerical and numerical ability
3. business and economic achievement

ARTISTIC
1. ambiguous, free, unsystematized activity, to create art forms or products
2. expressive, original, intuitive, introspective, artistic, and musical ability
3. esthetic qualities

ENTERPRISING
1. manipulation of others to attain organizational or economic gain
2. aggressive, popular, self confident, sociable, leadership and speaking ability
3. political and economic achievement

SOCIAL
1. manipulation of others to inform, train, develop, cure, enlighten
2. helping, understanding, teaching ability
3. social and ethical activity and problems

1 = preferences
2 = self perception
3 = values

recreational activities and preferences" (1973, p. 7), and Holland regards the Vocational Preference Inventory as a personality inventory (1978, p. 8).

Holland (1973, 1981) contends that members of an occupational group have similar personal development. Because of this similarity it is reasonable to expect that they will respond to environmental demands in similar ways. Congruence between the person and his environment is defined by his personality structure and environmental models. Holland states:

> A person is in a congruent or fitting environment when the environment calls for activities he prefers, demands his special competencies, and reinforces his personal disposition and its associated characteristics -- a special outlook on the world, role preference, value and personal traits. (1973, pp. 9-10)

Therefore, in theoretical terms, people will change jobs "because of excessive person/environment incongruency or because of an opportunity to increase their congruency" (1981, p. 8). Making career decisions at appropriate times "may reflect only different rates of personal development and different contingencies" (1981, p. 9).

There is considerable supporting evidence for Holland's contention that personal orientations are reasonably stable. They and the occupational environments exist: "Most of the predicted characteristics of the types were found to hold, as were a large number of other characteristics and traits that further serve to differentiate the types from one another" (Osipow, 1983, p. 97). Holland (1981) presented the strengths and weaknesses of the typology. Strengths: It is easily understood, has a clearly defined, internally consistent structure with a broad base of research support from a wide variety of age and occupational groups, and it is easily applied to practical problems. Weaknesses: Hypotheses about work environments require further exploration, "Many important personal and environmental contingencies lie outside the scope of the typology" (p. 22). Holland (1981) identified the need for large scale studies of adults and their careers; this study of occupational therapists will contribute information to the area Holland has identified.

Women's Career Patterns

Women constitute an ever-increasing percentage of the labor force, a trend that has been particularly noticeable since the 1960s (Shaw-Bell, 1978; Osipow, 1983; Canadian Mental Health Association, 1984). However, the majority of career development theories apply to men.

Super (1978) proposed a system of career patterns for women; stable homemaker, conventional career, stable working career, double track career, interrupted career, unstable career, and multiple-trial career. Mulvey (1963) found in her sample of 475 women that one-third fell into the stable homemaking and conventional patterns. She suggested that the work role is likely more central to and more intrinsic to woman's life than previously thought. Vetter and Stockburger (1974) support that position. The results of their national study show that these two categories comprised more than a third (51.2%) of their white respondents (N=3606) with another 34% in the interrupted and double-track career patterns. The degree of social change in the decade between these two major studies may be mirrored in the appearance of the interrupted and double-track career patterns. An expectation of an interrupted career pattern was reported in two female-dominated professions, nursing and teaching (Levine, 1969). Where long range career goals have been studied, the majority of female college graduates (N=3500) reported traditional field preferences (Rossi, 1965) which would likely place many of them into female-dominated occupational groups.

In an extensive review of Canadian literature relating to work importance, Casserly and Cote (1980) also note a substantial increase in the number of women in the workforce. In 1931, 3.5% of married women were in the labor force: by 1971 this had risen to approximately 37% and it is expected to reach the 50% level during the 1980's. At the same time, a substantial rise in the number of working women with children is also evident. Between 1967 and 1973 this number rose from 21% to 35%.

Several factors appeared to influence these rises and suggest that in future women may be expected to demonstrate a longer working life. A major increase in marriage breakdown and a growing number of single women in the workforce are reported, together with better educational levels, greater urbanization, fewer married couples with children, and a decline in the number of children per family. Statistics Canada (1984) reports that the number of persons in the labor force who were 25 years of age and over was estimated to be 9,266,000. Those occupying managerial and professional positions (which should include the health professions) numbered 2,755,000. The number of females in the labor force in the same age group was estimated to be 3,709,000, and those occupying managerial and professional positions was 1,208,000.

The latest statistics reported by Health and Welfare Canada in 1982 do not estimate the total workforce in the health manpower area, nor do they separate males and females. Information on health manpower is given by occupational groups.

In 1973 the total number of occupational therapists was estimated to be 1,062. This number was reported to have increased to 1,852 by 1981 (the latest reporting date). During that period the total number of graduates from university programs in occupational therapy increased from 196 to 310 per year. Although the figures reported by the universities may be considered to be accurate, the total number of therapists reported by Health and Welfare Canada is considered to be an underestimate of the national occupational therapy workforce. The figure reported is based on a 57% return of questionnaires from the Canadian Association of Occupational Therapists and a 95% return from La Corporation Professionelle des Ergotherapeutes du Quebec.

Women constitute a rapidly growing group in the Canadian labor force. Although statistics were not available for the percentage of females in the health workforce, this is likely to be very high considering the large number of female-dominated professions that are represented. The Canadian Mental Health Association (1984) findings support these observations. Occupational therapists constitute a very small percentage of the health manpower group indeed, with the ratio of persons in the general population to employed occupational therapists reported as 1:13,228 in 1981!

Home and career conflict and historical societal expectations probably inhibit women's career development..."the workplace and the family place a double burden on working women" (Canadian Mental Health Association, 1984). Studies of dual career and double-track career patterns still indicate that women actually perform two jobs -- "one with and one without pay" is the way Super described the situation (1978, p. 75). O'Toole (1982) sees "the division of domestic labour" (p. 235) as the greatest constraint on women developing professional careers. Farmer and Bohn (1970) concluded that women's level of vocational interest would be raised if home-career conflict was reduced. It is evident that role value, commitment, and participation in work by females should be investigated. Faver's (1982) findings suggest that women's participation in the labor force "is partially a function of the interaction betwen career and family demands and values" (p. 67). Casserly and Cote (1980) reported that a large proportion of Canadians still adhered to the philosophy that a woman's place is in the home. Although this was less pronounced in younger people and in those with higher education, this philosophy from the late 1960's is likely just as prevalent today. More women than men considered that they should supplement the family income; with the economic downturn of the 1980's this attitude has likely changed, it would be inappropriate to explain women's career patterns solely on the basis of financial need, as many women reported that work was also a source of status and prestige.

Vetter and Stockburger (1974) state that much of the information on "women's careers is in terms of aspirations and expectations of students rather than the accomplishments of workers" (p. 3). The present study dealt with females who had completed a professional training program and entered employment.

Many variables are considered to be related to career development, two prominent ones being age and educational level. In the present study the basic professional qualifications were common to all respondents. However, age may not be as significant as level of responsibility as indicated by the position the respondent holds. Another powerful influence is educational level. Ostry (1966) reported that education exerted a stronger influence than age "in determining whether or not a woman enters the labor force" (p. 19). In the preliminary study (Madill, Brintnell, & Stewin, 1983) occupational therapists who held senior administrative positions and/or worked in non-traditional settings demonstrated higher commitment, participation, and role values for work than therapists with interrupted career patterns who were not currently working. The number and age of children play a large part in determining how actively women will participate in the work force (Ostry, 1966).

Casserly and Cote (1980) summarized the factors that contribute to women's participation in the workforce in Canada. The following are relevant to this project. Child status and income of the head of the household before taxes were major contributors. Generally the greater the family's assets the less likely the woman is to work, financial security possibly increasing the number of options or choices. The most important factor, however, appears to be the educational level, vocational or technically oriented training increasing the likelihood of participation. This may have been influenced by the supply and demand situation but also, as in the case of occupational therapy, by a desire "to keep one's hand in" so as to avoid the need for refresher education or possibly recertification after an absence of five years or more.

The extent to which female-dominated professions form a special case in career development for women is not known. The situation is common to what Etzioni (1969) terms "semi-professions" -- therapists, nurses, social workers, and librarians have been included. Among the characteristics of such groups are lower educational requirements at entry level (predominantly baccalaureate), multiple entry routes, and fewer legal regulations governing professional activity. These factors, plus marked income differentials, contribute to the lower status or prestige afforded to these occupational groups (Grimm, 1978). The degree to which such factors negatively affect work salience in these professions is not known.

Greenhaus (1971) reported that career salience was positively related to occupational satisfaction for females. In 1973 Greenhaus reported that self esteem was positively related to career salience. However, females who demonstrated high self esteem were not necessarily those who value career advancement or place their highest priority on a career as a source of life satisfaction.

Job Satisfaction

Several authors who have surveyed the literature in this area report that the majority of workers are satisfied, particularly those in the white collar classification (Rogers, 1979). Campbell and Klein (1975) referred to the early work of Hoppock, who demonstrated in 1935 that an individual's occupational level affects attitudes toward work, and that the highest occupational level was associated with the highest satisfaction level. However, Edelwich and Brodsky (1980) have indicated that all levels of health service personnel suffer from "burnout", "...the feeling of powerlessness is universal; it goes beyond one's hierarchical status..." (p. 14), "...at any level one can find good reasons (if one chooses) to feel inadequately rewarded for one's contribution" (p. 96). "The feeling that one's career is at a dead end can come to almost anyone at any time" (p. 102). The job satisfaction of occupational therapists did not appear to have been studied on a large scale. Data reported by Maxwell and Maxwell (1977) from part of a larger study indicated that the majority of respondents (N=836) were generally satisfied with their current positions, and 86.2% indicated that their career was one of the three most important sources of satisfaction in their lives. However, Frese (1982) drew attention to findings that suggest the high percentage of satisfied workers often reported could be influenced by a large proportion who are "passively resigned to their situation" (p. 219). Such workers demonstrate what has been termed resigned job satisfaction, a situation where the initial general satisfaction level is lowered by a decrease in the level of aspiration. How the therapist's occupational level affects his/her attitude towards work has not been established.

Career ladders are short for occupational therapists. Generally, some form of junior or senior classification exists (Grade I and Grade II are used in Alberta). From there, any upward mobility as a clinician is severely limited. Edelwich and Brodsky (1980) described the situation well when they stated that

> For most people who come into the helping professions (as most do) to work directly with people, it is frustrating to learn that the surest and sometimes the only route to advancement is not through front-line involvement with clients, but through supervisory and administrative work...[which] entails working less with people and more with official forms, budgets and subordinate staff members. (p. 105)

Clinical specialists in occupational therapy are for the most part only informally recognized by their peers. This status may also be unofficially acknowledged within the individual department, but is seldom a formal occupational level differentiated by salary, policy-making authority, or decision-making power. Therapists at lower levels may in fact be performing roles that are closer to their original expectations and educational level than those above them. Therefore a measurement of job satisfaction was included in this study.

Casserly and Cote (1980) found from their review of Canadian literature that men and women were similar in their evaluations of their work environments. The level of job satisfaction generally paralleled the importance that each attached to different features of that environment. Both groups appear to be equally satisfied with the level of challenge and salary. Women were more satisfied with supervisory features but less satisfied with fringe benefits and promotional opportunity. Again, the home-career conflict and the dual role functions for the steadily increasing number of married working women were likely influences.

The workplace does provide a number of instrumental or extrinsic benefits -- it was shown to be a valuable social setting for both men and women (Canadian Mental Health Association, 1984). Interpersonal relationships were reported to be a major source of job satisfaction. According to this recent Canadian study, greater satisfaction was derived from the psychological and social aspects of the job than from economic and practical aspects.

Lofquist and Dawis (1969) proposed a theory of work adjustment. This theory "provides a model for conceptualizing the interaction between individuals and work environments" (Dawis & Lofquist, 1976, p. 55), and the purpose is to predict work adjustment. The major components are outlined in Figure 5, where Dawis and Lofquist (1978) have demonstrated the essential element of "correspondence", the continual interaction between worker and working environment in what they describe as a dynamic model.

The individual (I) brings a set of "needs" (N) to the employment situation and proceeds to assess these against a set of expected "reinforcers". When reinforcers equal or exceed the individual's needs, satisfaction (SN) results and work behavior is demonstrated. Work behavior consists mainly of task performance which is evaluated by the work environment (E) against task requirements. When this evaluation meets or exceeds requirements the individual (I) is considered satisfactory or has achieved "satisfactoriness" (SS) resulting in organizational behavior that produces the reinforcement, and so the cycle continues.

Figure 5

Work from a Systems Standpoint

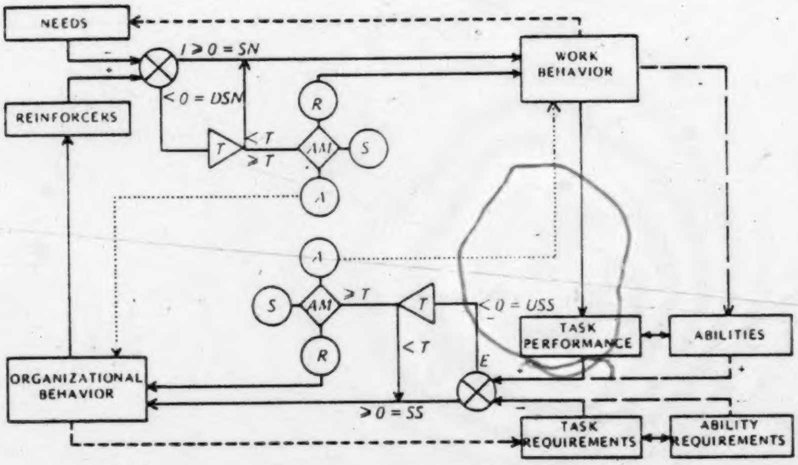

NEEDS
REINFORCERS
$I \geq 0 = SN$
$< 0 = DSN$
WORK BEHAVIOR
R
T
$< T$
$\geq T$
AM
S
A
A
S
AM
$\geq T$
T
$< 0 = USS$
$< T$
R
E
ORGANIZATIONAL BEHAVIOR
$\geq 0 = SS$
TASK PERFORMANCE
ABILITIES
TASK REQUIREMENTS
ABILITY REQUIREMENTS
-
+
-
+
+
-

Figure 5.5. Work adjustment from a systems standpoint. Published with permission from the *Journal of Vocational Behavior*, 1978, *12*.
Copyright 1978 by Academic Press, Inc.

Another cycle is proposed for dissatisfaction (DSN) where the individual (I) will tolerate the situation or seek a better adjustment through an "adjustment mode" (AM). Two options are presented: a "reactive mode" (R) where the situation is accommodated, or "active mode" (A) where the individual may act to change the situation.

Osipow (1983) in his review of this theory and instrumentation considered it to be "relatively straightforward and simple", with testable propositions and promising instruments, but with little work that has elaborated or applied it.

Dawis and Lofquist (1976) have also addressed "work personality style dimensions" in relation to their theoretical position. Work adjustment was described as a dynamic interaction through which "the individual seeks to achieve and maintain correspondence" with the work environment. The personality style dimensions are:

--"flexibility", the tolerance the individual has for "discorrespondence";

--"activeness": the degree to which the individual acts on the environment to change it;

--"reactiveness": the degree to which the individual responds by changing personal characteristics;

--"celerity": the speed with which the individual moves to increase the "correspondence"

Lofquist and Dawis's (1969) theory of work adjustment and their later expansion of the personality style dimensions appear to be consistent with Holland's position. Individuals seek work environments that are congruent with their personality type and personal stability, achievement and satisfaction increase when the occupational environment is consistent with that personal orientation. Lofquist and Dawis (1978) have discussed values in the context of their work adjustment theory and describe them as "second-order needs" (p. 12). Values were defined as "reference dimensions for the description of needs...[that] bear the same relationship to needs as abilities do to skills" (p. 13). The individual's preference for reinforcers may be influenced by their value system. Such preferences are observable and "values are inferred from these preferences" (p13).

Super described values as objectives that an individual strives to attain to satisfy a need. This is not incompatible with Lofquist and Dawis's position, who used values as basic dimensions of importance to define needs. They took the position that if needs can be classified according to the underlying common elements then those commodities, or basic dimensions, constitute values.

Summary

The issues raised in this section support the need for a cross sectional analysis of life role values of the population of occupational therapists in Canada. Although vocational interests have been shown to be very stable after 25 years of age (Campbell & Klein, 1975), life role values may not follow a similar pattern throughout the career. Job satisfaction likely varies throughout the career: how this is represented in occupational therapy is not known. Little baseline data were available about this occupational group. What exists was reported in 1977 by Maxwell and Maxwell, and this continues to represent, at times inappropriately, the profile of this occupational group. The assigned Holland Code was not supported in the Alberta study: it was necessary to see if this constituted a regional artifact or an invalid code assignment.

Therefore, four research questions were posed.

Research Question 1:

(A) To identify the level of importance that occupational therapists attach to five major life roles (studying, working, home/family, community, and leisure) as determined in the Life Roles Inventory.

(B) To compare that level of importance across predetermined age ranges, position categories, and educational levels.

Research Question 2:

(A) To determine the relative importance that occupational therapists ascribe to twenty values as delineated in the Life Roles Inventory.

(B) To compare this ranking across age ranges, position categories, and educational levels.

Research Question 3:

(A) To identify the level of job satisfaction reported by occupational therapists as delineated in the Minnesota Satisfaction Questionnaire.

(B) To compare the level of job satisfaction across age ranges, position categories, and educational levels.

Research Question 4:

(A) To determine the accuracy of the assigned Holland Code for occupational therapy (S-R-E).

(B) To generate a Holland Code for occupational therapy on the basis of empirical data.

CHAPTER III

METHOD

Subjects

In order to ensure that as many occupational therapists in Canada as possible were reached, access to the membership lists or registries of both the provincial and national occupational therapy associations was obtained. A master list was prepared by comparing these lists and removing redundancies. To be eligible to participate therapists had to reside in Canada, have completed their professional qualification, and be eligible to practice occupational therapy in this country. The number of eligible therapists contacted reflects those on association lists as at September 1, 1983. The numbers of participants by province are listed in Table I.

Table I

Number of Eligible Therapists Contacted and Number of Participants, by Province.

	Contacted	Participated	(%)
British Columbia	474	231	(48.7)
Alberta*	112	101	(90.1)
Saskatchewan	74	44	(59.4)
Manitoba	139	77	(55.4)
Ontario	1075	541	(50.3)
Quebec	670	315	(47.0)
Nova Scotia	72	41	(56.9)
Newfoundland & Labrador	33	12	(36.4)
New Brunswick	34	22	(64.7)
Prince Edward Island	25	14	(56.0)
Northwest Territories/Yukon	4	2	(50.0)
Unable to locate/ineligible/ deceased	(86)	-	-
TOTAL	2627	1400	(53.3)

*Limited to those who did not participate in preliminary study.

From Table I it was evident that the majority of the population resided in Eastern Canada. Response rates reached or exceeded the 50% level in all but three provinces. Both B.C. and Quebec came within 3% of that level. Newfoundland and Labrador had the poorest return rate (36.4%) but when the responses from the Maritime provinces were combined the return rate for that region reached 54%.

Demographic data for the sample of occupational therapy respondents (N=1400) is presented in Table II. The majority of the sample are Canadian citizens (74%), female (96%), employed full-time (72%), currently married (65%), and between 31-44 years of age (42%). Those between 25-30 years of age comprise the next largest group (38%). The majority of respondents indicated that the baccalaureate degree was their highest academic qualification (68%). Only 5.5% of respondents reported holding graduate degrees; however, a total of 9% reported that they are students (2% on a full-time basis). The majority of respondents occupied staff therapist positions (49%). The next largest group (28%) reported being in administrative/managerial positions. The combination of administrative and clinical roles is very common, particularly in small units. Therefore, the ratio of supervisory to service personnel appears unusually high. Opzoomer and Filuk (1984) reported that 62% of their respondents (N=1340) were service personnel but 21% combined administrative and clinical roles to varying degrees. A total of 14% of the respondents were not working in the field when they completed their inventories; 2% of this group reported that they had retired.

Table II

Demographic Data
Number and Percent of Total Sample (N=1400)

Sex		**Marital Status**	
Female	1345 (96%)	Never married	337 (24%)
Male	55 (4%)	Now married	904 (65%)
		No longer married	155 (11%)
		No response	4 (<1%)
Age Ranges		**Citizenship Status**	
<25 years	57 (4%)	Canadian citizens	1039 (74%)
25-30 years	529 (38%)	Native persons	10 (<1%)
31-44 years	593 (42%)	Immigrant/Perm. Res.	318 (23%)
45-64 years	212 (15%)	Missing data	43 (3%)
>65 years	9 (<1%)		
Educational Level		**Position Level**	
Diploma	372 (27%)	Staff therapist	684 (49%)
Baccalaureate	950 (68%)	Clinical supervisor/ service leader	71 (5%)
Master's	64 (5%)	Managerial	327 (23%)
Doctorate	7 (<1%)	Private practice/ consultant	80 (6%)
Missing data	7 (<1%)	Faculty/research	44 (3%)
		On leave/not practicing	164 (12%)
		Other (retired)	30 (2%)

Instruments

Two vocationally related inventories and one satisfaction questionnaire were used to examine the research questions.

The Vocational Preference Inventory (VPI) was used to determine the validity of the Holland Code (S-R-E) assigned to occupational therapy. The VPI is a self-administered occupational preference inventory of 160 occupational titles for which the respondent records his preferences on a single answer sheet. The inventory takes 15 - 30 minutes to complete.

To determine the occupational code or Holland Code, the three highest raw scores are determined for six scales: realistic, intellectual, artistic, social, enterprising, and conventional. Holland (1965) stated that "These represent the favoured and rejected methods of adaptive behavior, the desirable and threatening life situations, the self concept, special social and physical skills, favorite coping patterns, values and attitudes" (p. 14). Scores on the remaining five scales that are pertinent to the clinical use of the VPI were not used in this study.

The test-retest reliability for each of the scales used was moderate to high. For adult women with a mean age of 40.7 years: 0.65 - 0.83 after a two-week interval, and 0.57 - 0.84 after a two-month interval (Holland, 1965). Internal consistency coefficients for employed females (N=328) on the six scales were acceptable: realistic 0.72, intellectual 0.89, artistic 0.87, social 0.84, enterprising 0.77, and conventional 0.86 (Holland, 1965).

In a review of the VPI, Walsh (1978) supported the adequacy of the reliability data but stated that validity studies were still needed on large non-college populations. Data collected to answer this research question contributed to this area.

The Life Roles Inventory (LRI) was used to determine what elements or values were most important to respondents, to identify the degree of participation, commitment, and role value that respondents assign to the five major life roles, and to collect the neccesary demographic data for the occupational therapy population.

The LRI is a self-administered vocationally related inventory with two major sections: a values inventory which measures the importance of specific values, and a salience inventory that measures the importance of specific roles (Casserly 1982). It takes 30 - 45 minutes to complete. In Part 1 (Values), respondents are asked to indicate the degree of importance they attach to 100 statements on a four-point Likert-type scale. Each of the statements has been assigned to one of 20 value scales (e.g., achievement, altruism, autonomy, etc.). The definition of each of these values, and sample items, are included as Appendix B.

Part 2 (Salience) has the respondent focus on five key activities: studying, working, community service, home/family, and leisure. Sections one and two examine participation and commitment in the five key activities. Respondents indicate on a four-point scale the amount of time they spend in, and their feelings about, ten areas related to each of the key activities. A third section deals with role values and it examines the values that the respondent seeks in the five key activities or major life roles. Respondents complete 14 questions related to each of the key activities using a four-point scale. (An additional category of "not applicable" is also available.)

In Part 3 (Personal Information) respondents report demographic data: age, sex, marital educational, and employment status. The final revisions to the Canadian edition of the LRI were completed in September 1983. Preliminary data from occupational groups in Alberta included data for occupational therapists (total N = 171, 77% female). Coefficient alpha internal consistency reliabilities have been computed for each Value Scale. Reliability coefficients range from 0.72 - 0.86 with a median of 0.80. Internal consistency coefficients for participation range from 0.90 - 0.96, commitment 0.91 - 0.96, and for the role values (based on five items) 0.72 - 0.86.

Data from English and French speaking male and female adults (N=6382) collected across Canada as part of the standardization of the LRI included occupational therapists (N=1400). The coefficient alpha internal consistency reliabilities (computed in February 1985) for each of the value scales are similar to those reported in the preliminary study. Reliability coefficients range from 0.67 to 0.88 with a median of 0.80. Internal consistency coefficients for participation range from 0.85 to 0.95, for commitment 0.89 to 0.95, and for the role values 0.87 to 0.90.

The short form of the Minnesota Satisfaction Questionnaire (MSQ) was used to examine respondents' feelings about their present jobs. Where participants reported that they were not employed or were no longer working as occupational therapists they were asked to complete the MSQ on the basis of their last occupational therapy position. This form consists of 20 items rated on a five-point Likert scale that "was constructed to sample intrinsic, extrinsic reinforcement dimensions" (Weiss, Davis, England, & Lofquist, 1967, p. 12) and the level of general satisfaction. The short form of the MSQ contains the 20 items from the long form that demonstrated the highest correlation with their respective scales. (The definition of each of these items is included as Appendix C.) The questionnaire takes 5 - 10 minutes to complete.

Data collected on a heterogeneous sample of 1460 employed men yielded high reliability coefficients (data for women were not reported). Median reliability coefficients are reported as 0.86 for the intrinsic scale, 0.80 for the extrinsic, and 0.90 for general satisfaction (Weiss et al., 1967). Test-retest data for general satisfaction produced coefficients of 0.89 after a one-week interval, and 0.70 after one year (Weiss et al., 1967). The general, intrinsic, and extrinsic satisfaction scores were used in the present study.

Data concerning the participant's position and educational level were collected on a short checklist: the occupational therapist information sheet (OTIS).

Procedure

Two mailings were used, as this was found in the preliminary study to be the most effective method of preventing substantial loss of the inventories (thus reducing the expense of mailing duplicate copies).

Each eligible participant received the first mailing during January and February 1984. It contained a letter of invitation and the agreement to participate. Within the agreement participants were asked to indicate in which of the official languages they preferred to work. The option of not participating was also provided in an effort to eliminate these therapists from the master list and therefore from follow-up mailings (216 therapists indicated they did not wish to participate). When the completed agreements were returned, the second mailing containing the three vocationally related inventories was forwarded. Participants were requested to return the completed inventories within two weeks of receiving them.

Follow-up letters to "delinquent" participants, and notices in both provincial and national association newsletters were employed to maximize the response rate. Provincial association presidents and board members from the national association also received regular "updates". These were set up so that they could be posted on notice boards and sent out to clinical settings.

The first and second mailings were handled by the Employment Services Branch of the Canada Employment and Immigration Commission (CEIC). Financial support for other costs incurred in this study was also received from the CEIC.

When packages were returned they were checked to ensure that all sections had been completed. When this was not the case, they were returned to the participant with an explanatory letter and a stamped, addressed return envelope. When the missing data were items that could be handled by phone (eg, missing demographic data), phone calls were used. Follow-up procedures for missing data were conducted in the official language of the participant's choice. Every effort was made to reduce the possibility of missing data.

Design and Data Analysis

As the purpose of this study was to systematically describe the facts and characteristics of a particular population, it fell into the category of descriptive research. A cross-sectional analysis of an occupational group using the survey method was implemented.

Cross-sectional analysis refers to a single evaluation which is administered to all the members of an occupational group. The survey is considered the most appropriate method of reaching a large number of potential respondents who are spread over a wide geographic area. Although it is comparatively inexpensive, self administered, and anonymous, it also has some limitations. Isaac and Michael (1981) have outlined the risks and disadvantages: Respondents are confined to those who are accessible and cooperative; surveys may engender a special group/special status feeling amongst potential participants and can "arouse response sets" such as acquiescence; survey respondents can be susceptible to "under-rater or over-rater bias" (the tendency to check consistently high or low ratings). Three major disadvantages of the survey method can create problems for an investigator: A low response rate, no assurance that the respondent understood the items, and no assurance that the "addressee actually was the one who answered" (p. 130).

With reference to the present study, the potential for a special group or special status was reduced by the use of the population and not a representative sample. In interviews conducted as part of the preliminary study, there was no indication that participants had difficulty understanding the items. In view of the general interest in the survey topic at a national presentation of some of the preliminary results, it was anticipated that the potential for someone other than the addressee to answer was substantially reduced. Attempts to maximize the response rate by appropriately timed follow-up have been outlined under "procedure".

As the study is of a descriptive nature, the major concern was to determine the proportion of respondents who fell within the areas under consideration (for example, those attaching high levels of importance to certain life roles and values).

A second interest was to determine if these proportions vary according to the classification variables: age, position, and educational level. The classification variables were chosen with reference to Super's (1980, 1983b) model of vocational maturity. The five age ranges were determined from those Super had used in conjunction with the four major periods he described (see Proposition 5, page 13).

Exploration:	
- implementing vocational preference	<25 years
Establishment:	
- trial commitment, stabilization	25-30 years
- advancement, consolidation	31-44 years
Maintenance:	
- preservation of achieved status/gains	45-64 years
Decline:	
- deceleration	$\geq$ 65 years

Position categories were selected using the Maxwell & Maxwell (1977) survey as a guide and position designations across the country. Seven categories were determined:

Staff Therapist/Senior Therapist
  - primary clinical service provision

Clinical supervisor/Section leader
  - some administrative/leadership role, service provision a secondary function

Manager
  - administrative role is the primary function

Educator/Researcher
  - primarily in an academic rather than a clinical setting

Private practitioner/Consultant
  - primary service provision on self employed basis

On leave/Not practicing
  - includes maternity and study leave

Retired

Four educational levels were used:

Diploma
- three year university level program (discontinued in 1978)

Baccalaureate
- four year university degree (basic educational level)

Master's
- two years post baccalaureate, includes degrees in allied fields

Doctorate
- two years post master's, includes degrees in allied fields

To address the three major objectives for this study (see page 4), four research questions were posed. These are outlined below in their order of importance. Each question had two parts, the first part addressing the total sample and the second part focusing on the subgroups formed by the three classification variables.

Research Question 1

A. To identify the level of importance that occupational therapists attach to five major life roles (studying, working, home/family, community, and leisure) as delineated in the Life Roles Inventory.

B. To compare that level of importance across predetermined age ranges, position categories, and educational levels.

The level of importance that the total group of respondents attached to the five major life roles was assessed using the work salience section of the LRI. Responses in each salience scale (participation, commitment, and role value) were analyzed using PsiCan's Life Roles Inventory scoring program (Macnab, 1984) to provide mean scale scores and their respective standard deviations. A composite profile of the salience scores was prepared using a modified "box and whisker plot" first described by Tukey (1977) and outlined by Velleman & Hoaglin (1981). For the purposes of forming a foundation for a career pattern study it was necessary to display the overall pattern of or trend across the sample and the schematic plot or skeletal box plot provided the best vehicle. This type of exploratory data analysis provided a visual display recording the "behavior of the data": how wide a range of values (numerical) the data cover, where these values are concentrated, the degree of homogeneity, and whether any values stray markedly from the rest. "With one glance the eye can easily form impressions of overall level, amount of spread and symmetry" (Velleman & Hoaglin, 1981, p. 66).

The figures presented in the chapter on Results illustrate the proportion of respondents above and below the median. The level of importance that a life role has was determined by its relative position on a four-point scale where 1 represents little or no importance, 2 = some importance, 3 = important, and 4 = very important. The position of the "box" in relation to these levels illustrates to what degree 50% of the respondents endorse a particular value or participate in a specific role, and the extent to which they are committed to, or seek to realize, their values through that role. An illustration of the box and whisker display is shown below (Maguire, 1984).

```
1 . . . . . . . 2 . . . . . . . 3 . . . . . . . 4
  o--------------[      *      ]-----------o
               25%ile    50%ile   75%ile
```

The two circles represent the highest and lowest responses, the extreme scores. The box length represents the distance between quartiles, with 50% of responses falling within the box. It has been drawn with the 25th percentile marking its lowest boundary and the 75th percentile marking its upper boundary. The asterisk represents the median, the 50th percentile. The whiskers are used to join the extreme or extraordinary scores to the 25th percentile and 75th percentile boundaries.

Research Question 2

A. To determine the relative importance that occupational therapists ascribe to twenty values as delineated in the Life Roles Inventory.

B. To compare this ranking across age ranges, position categories, and educational levels.

The relative importance that therapists ascribe to the twenty values in the LRI was assessed using Part 1 of the instrument. Means and standard deviations were computed using PsiCan's Life Roles Inventory scoring program. The level of importance of any value scale was determined by its relative position on the four-point scale previously described. A composite profile of the value scales was prepared in the "box and whisker plot" format.

Research Question 3

A. To identify the level of job satisfaction reported by occupational therapists as delineated in the Minnesota Satisfaction Questionnaire.

B. To compare the level of job satisfaction across age ranges, position categories, and educational levels.

The level of job satisfaction was assessed using the general satisfaction score from the Minnesota Satisfaction Questionnaire.

Intrinsic and extrinsic scale scores also were computed.

The level of satisfaction on each of the three scales was determined by summing the weighted scores (each item being rated on a five-point scale) according to the procedure outlined in the test manual. The three scales on the short form, the number of items, minimum and maximum possible scores, and their equivalent levels of satisfaction are tabulated below:

Table III

Scoring Criteria for Minnesota Satisfaction Questionnaire

	Satisfaction Scales		
	General	Intrinsic	Extrinsic
Number of items	20	12	6
Min-Max scores	20-100	12-60	6-30
Five-point scale equivalents			
1 = very dissatisfied	20	12	6
2 = dissatisfied	40	24	12
3 = neither	60	36	18
4 = satisfied	80	48	24
5 = very satisfied	100	60	30

Research Question 4

A. To determine the accuracy of the assigned Holland Code for occupational therapy (S-R-E).

B. To generate a Holland Code for occupational therapy on the basis of empirical data.

The responses to the Vocational Preference Inventory were coded on six scales for all respondents. The incidence of all possible three-letter codes was recorded for the total group and the incidence of S-R-E noted. The resulting Holland Code generated from empirical data was based upon the three scales which received the highest mean scores.

Limitations

This descriptive study represents the first attempt to assess the values, salience, and interest patterns of the population of occupational therapists in Canada. The overall response rate reported by Maxwell and Maxwell (1977) in their national occupational therapy study was 56%. However, it should be noted that response rates reported in different sections of that study vary considerably: For example, those reported for job satisfaction are below the 50% level. In the present study the overall response rate was only 53.3%, and at no point does the number of respondents drop below the 50% level. In fact, it only drops below 53.3% in two areas -- where respondents reported their citizenship status (51%), and part-time activity (50%) -- neither of which are crucial elements. On this basis, the response to the present study and that reported by Maxwell and Maxwell were considered to be compatible.

Printing errors on the Life Roles Inventory compromised the analysis of total family income (where respondents were asked to report their 1981 income level) and part-time activity (where answer circles were provided on the left and right sides of the category "none of these").

When the classification variables (age, position, and educational level) are applied to the sample, the size of subgroups vary considerably. For example, under "age" those who are under 25 years (N=57) represent 4% and those over 65 years (N=9) represent less than 1%, while the minimum number in the other age ranges is never below 200. Therefore, response patterns in the smaller groups showed wide score ranges (and often large standard deviations) which are a product of group size rather than special group characteristics.

The Life Roles Inventory includes a wide range of activities under each of the five major roles. For example, included under participation in the working role are items referring to reading about and talking about work. High ratings given to these items by non-practicing respondents may raise their working role participation scores somewhat artificially.

CHAPTER IV

RESULTS

In this descriptive study, variation among respondents' levels of endorsement were visually checked by superimposing the boxplots in the configurations determined by the classification variables. Where the trend across mean scores to increase or decrease (in an amount approximating or exceeding that accounted for by the standard deviation) was observed, this variation is described as a "difference". Where over 50% of respondents endorse a value or role and that level of endorsement changes (increases or decreases) across classification variables, this trend is noted and the variation is also described as a "difference". Any statistical significance is yet to be determined.

The results of this descriptive study are presented under each of the four research questions. Each question has two parts, the first (A) referring to the total group (N=1400), and the second (B) referring to subgroups formed by the classification variables of age, position, and educational level (N's vary).

> Research Question 1A: To identify the level of importance that occupational therapists attach to five major life roles: studying, working, home/family, community, and leisure, as delineated in the Life Roles Inventory.

In Figure 6, results of the work salience section of the Life Roles Inventory are presented. In this section, participation refers to what the respondent does or has done recently, the level of commitment indicates how the respondent feels about a role, and role value indicates to what extent one seeks values in the five major roles. The role with the highest rating for participation is working; over 50% of respondents place work, home/family, and leisure activities between 2.0 and 3.4. Participation in studying is rated between 2.0 and 3.0, while community service is rated between 1.3 and 2.4. However, over 50% of respondents are most committed to the home/family role (3.0 - 4.0), followed by working (3.0 - 3.8). Commitment to leisure activities, studying, and community service roles follow in that order.

Respondents seek to implement their values in a similar order, first through home/family (2.9 - 3.6), and working (2.9 - 3.5). Leisure activities (2.5 - 3.3), studying (2.0 - 3.0), and community service roles (1.9 - 2.9) follow in that order.

The home/family and working roles receive the highest ratings across the three salience scales. Although the community service role is of some importance to these respondents, it received the lowest rating on each salience scale.

Research Question 1B: To compare that level of importance across predetermined age ranges, position categories, and educational levels.

Salience and Age

When the respondents in this sample are grouped according to the five age ranges that correspond to Super's stages of vocational maturation (Figures 7 - 11), the changes in the pattern of salience scale ratings appear to reflect his life span developmental approach to vocational demands. Over 50% of those under 25 years of age (N=57) rate their level of participation in the working, leisure, and studying roles between 2.4 and 3.4. Their participation in the home/family role (1.8 - 2.5) is the lowest reported for the five age groups. Respondents in this group are also most committed to the working, leisure, and studying roles, over 50% of them rating their level of commitment between 2.6 and 3.8 for those life roles. A very wide range of scores (1.9 - 3.6) between the 25th and 75th percentile rank is reported in terms of commitment to the home/family role. The community service role is of less importance to this group (1.6 - 2.6). A similar order is noted for the role values section, where working and leisure roles receive the highest rating (2.8 - 3.6).

In the 25-30 year age group (N=529) 50% of respondents rate their participation in the working and home/family roles between 2.7 and 3.4. Participation in the leisure and studying roles receive the next highest rating, between 2.0 and 3.1. This group of respondents is most committed to the home/family and working roles (2.8 - 3.8). The leisure and studying roles are also of considerable importance (2.2 - 3.4). A similar pattern is evident in terms of their role values. Although the community service role maintains its position as the least important life role, respondents in this age group show a similar pattern to those in the under-25-year group: commitment and role value ratings are higher than their level or degree of participation in the community service role.

In the 31-44 year age group (N=593) the same pattern in terms of participation in the home/family and working roles is seen. Although 50% of respondents report high levels of participation in the working role (2.7 - 3.5), they assign somewhat higher levels of commitment and role value to home/family (3.2 - 3.5). Participation in the leisure role is gradually decreasing across these two age groups, while the previously described pattern of higher commitment and role value ratings in comparison to the level of participation reported for the community service roles is maintained.

The pattern of salience scale ratings reported by 50% of the 45-64 year age group (N=212) is very similar to those in the 31-44 year category. The working and home/family roles maintain a high level of participation (2.4 - 3.5), commitment (3.0 - 4.0), and role value (2.7 - 3.6) for this group. The community service role is given higher ratings by this group across the three salience scales. A gradual increase can be noted in this area by the groups of respondents who are over 30 years of age.

The number of respondents who are 65 years and over is extremely small (N=9) and they are not a homogenous group. Their responses vary widely, particularly in relation to the working and studying roles. Both the small group size and the likely combination of retired and non-retired respondents contribute to the variability observed. Despite these factors, a high level of commitment and role value is assigned to the home/family role, which is rated between 2.6 and 3.5.

Three trends are evident when the results of the salience scales are reviewed across the five age groups: As the age of the respondent groups increases, the level of participation, commitment, and role value assigned to the home/family role gradually increases and that assigned to leisure decreases; the level of commitment and role value assigned to the community service role gradually increases.

Salience and Position Level

When respondents in this sample were grouped by position level, an attempt was made to include those with similar levels of responsibility in the same categories. The rating assigned to each of the salience scales across the seven position levels is illustrated in Figures 12-18.

Staff therapists (N=684), the front line service providers, report the role in which they participate most extensively is working, rated between 2.7 and 3.4 by over 50% of these respondents. The home/family, leisure, and studying roles follow, being rated between 2.0 and 3.1. The community service role is of less importance, being rated between 1.2 and 2.2.

Over 50% of the staff therapists were highly committed to the home/family role (2.9 - 3.9). This is closely followed by working (3.0 - 3.7). The studying and community service roles follow in that order, and are of less importance to this group than the leisure role (2.5 - 3.4).

A similar pattern is observed in terms of role value realization. The rating given to the home/family and working roles are very closely aligned (2.8 - 3.6). The leisure role is again highly rated (2.6 - 3.3) and exceeds that assigned to the studying (2.0 - 3.0) and community service roles (1.8 - 2.8).

Clinical supervisors and service leaders (N=71) also undertake administrative and leadership roles in addition to their service provider function. This group gave participation in working a higher rating than staff therapists (2.9 - 3.6). This is followed by the leisure, studying, home/family, and community service roles where, except for the latter, they are rated between 2.1 and 3.1. The wider range of responses by clinical supervisors and service leaders to each of these roles was likely influenced by the smaller group size, in comparison to the large staff therapist category.

Clinical supervisors and service leaders in this sample, like the staff therapists, demonstrated a high level of commitment to the home/family and working roles (2.7 - 4.0). A similar pattern is noted in role value realization, where these roles are rated between 2.6 and 3.6

by over 50% of respondents. The leisure role maintains its position as the next most important (2.6 - 3.4), followed by the studying and community service roles (1.9 - 3.1)

At the managerial level (N=327), where the administrative role is the primary function, the pattern across the salience scales is almost identical to that presented for the clinical supervisor/service leader category. One difference should be noted: The level of role value assigned to the leisure role decreased slightly, being rated between 2.4 and 3.0 by 50% of these respondents.

Private practitioners and consultants (N=80), therapists who provide front line service and consultation on a self employed basis, report their highest levels of participation in the working and home/family roles. Over 50% of them rated their activity in these life roles between 2.5 and 3.4. Although a similar pattern is seen in commitment and role value realization, the home/family role takes precedence (3.0 - 4.0). The level of commitment and role value realization in the studying and community service roles (1.6 - 3.2) has generally been maintained when compared to the managerial level, where the role value assigned to the leisure role has risen (2.6 - 3.3 by over 50% of respondents.

The faculty member/researcher group (N=44), therapists primarily involved in an academic rather than a practice setting, participates most extensively in the working and studying roles (2.7 - 3.8). Participation in the home/family role is very much lower (2.3 - 3.3). Participation in the community service role is at a similar level to that of the managerial and private practitioner groups, while participation in leisure activities has declined (2.0 - 3.0).

Commitment to the working and home/family roles is extremely high

(3.1 - 4.0), closely followed by the studying role (2.7 - 3.9). All these life roles are of considerable importance to the faculty member/researcher group in this sample. Commitment to the community service and leisure roles is substantially lower (1.8 - 3.3). Role value realization follows a similar pattern but the leisure and community service roles receive higher ratings by this group than those indicated by the private practitioner and managerial levels.

Over 50% of the respondents who were on leave (including maternity and study leave) and/or not employed in the field (N=164) indicate their highest level of participation, commitment, and role value realization is through their home/family role. Ratings between 2.6 and 4.0 are reported across the salience scales for this life role. Although the level of participation in the working role is much lower (rated between 1.8 and 3.0 by over 50% of these respondents) the level of commitment and role value assigned to the working role remained high (2.5 - 3.2 by over 50% of respondents). A similar level is assigned to the leisure role, while the community service and studying roles are of less importance to this group (1.9 - 3.0).

For respondents in the small group of retired therapists (N=30), participation in some aspect of the working role received the highest rating in this category (2.3 - 3.5); home/family, leisure, and studying roles are next (2.0 - 3.0). The community service role received the lowest rating, over 50% of this group rating this life role between 1.8 and 2.8. High levels of commitment and role value to both the home/family and working roles (2.6 - 4.0) are also reported. The community service and leisure roles received the next highest ratings (2.0 - 3.1), which slightly exceeds the level reported for the studying role (1.8 - 3.0).

Salience and Educational Level

Figures 19 - 22 illustrate the rating assigned to each of the salience scales across the four educational levels. When respondents in this sample are grouped according to educational level, the diploma level (N=372) respondents participate most extensively in the working and home/family roles (rated between 2.7 and 3.5 by over 50% of respondents, followed by the leisure role (rated beteen 2.2 and 3.1). The studying and community service roles received the lowest ratings in terms of participation (2.4 - 2.8). This group is highly committed to the home/family role (3.4 - 4.0); the working and leisure roles follow (2.4 - 3.8). The position of studying and community service roles is somewhat lower (1.8 - 3.4). A similar pattern is observed in terms of role value realization.

The baccalaureate level (N=950) respondents show a similar pattern in terms of participation, commitment and role value realization across the three salience scales.

The master's level (N=64) respondents are a much smaller group but the pattern across the three salience scales differs from that demonstrated by those at the undergraduate level. In terms of participation, over 50% of respondents rated the working and studying roles between 2.7 and 3.8; the home/family role follows (rated between 2.3 and 3.4). Participation in the leisure and community service roles is of lesser importance to this group (1.9 - 3.4). These respondents are highly committed to the home/family, working, and studying roles, with over 50% rating them between 2.8 and 4.0. Leisure and community service roles are also rated as important (2.1 - 3.3). In terms of role value realization, the working and home/family roles are both highly rated (2.8 - 3.7). The studying role received a lower rating on this salience scale (2.6 - 3.4), while community service and leisure roles maintain a level similar to that under commitment.

Therapists at the doctoral level are an exceedingly small group (N=7) and a much wider range of salience scale scores is apparent here. The role of working is rated the highest in terms of participation, commitment, and role value (between 3.2 and 4.0). There is a high level of commitment to the home/family and studying roles (2.3 - 3.9). The community service role received a higher level of commitment (2.1 - 3.3) from this educational level than at the baccalaureate or diploma levels. A gradual increase in commitment and role value realization to both the community service and leisure roles is observed as the educational level increases. The studying and working roles are both highly endorsed in terms of role value realization (2.8 - 3.9). Unlike respondents in the other educational levels, this slightly exceeds the rating given to the home/family role (2.7 - 3.7).

In summary, when the total group (N=1400) is considered, the working and home/family roles receive the highest ratings on each of the salience scales of participation, commitment, and role value. Although respondents spend more time in the working role this is closely followed by the home/family role. The community service role receives the lowest rating across the three salience scales.

When the group is divided according to age the pattern of responses across the salience scales appears to be compatible with Super's stages of vocational maturation. As the age of the respondent group increases the level of participation, commitment and role value assigned to the home/family role gradually increases while that assigned to leisure decreases slightly. The level of importance assigned to working is closely aligned to the home/family role across all age groups and salience scales. The community service role gradually increases in importance for respondents over 30 years of age.

When the group is divided according to position level, the roles of working and home/family maintain their primary positions. Studying is the one role that approaches a similar level of importance and this only occurs in the faculty/researcher category (N=44). The community service role receives the lowest rating across all position levels and salience scales.

When educational level is used to subdivide the group, the working and home/family roles maintain their primary positions at each level. However, for those groups with graduate degrees participation in the studying role exceeds that for the home/family role. Respondents with graduate degrees report greater levels of commitment and role value for the studying role than those with undergraduate qualifications. A gradual increase in terms of role value and committment to the community service and leisure roles is observed as the educational level increases.

Figure 6

Salience Scales - Total Sample (N=1400)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.4	0.6	2.0	2.5	3.0	4.0	1.0
Working	3.0	0.5	2.7	3.1	3.4	4.0	1.1
Community Services	1.9	0.7	1.3	1.9	2.4	4.0	1.0
Home and Family	2.7	0.6	2.3	2.8	3.3	4.0	1.0
Leisure Activities	2.6	0.5	2.3	2.7	3.1	4.0	1.0
COMMITMENT							
Studying	2.6	0.7	2.2	2.7	3.2	4.0	1.0
Working	3.3	0.5	3.0	3.4	3.8	4.0	1.1
Community Services	2.3	0.7	1.8	2.3	2.9	4.0	1.0
Home and Family	3.3	0.7	3.0	3.7	4.0	4.0	1.0
Leisure Activities	2.9	0.6	2.4	2.9	3.4	4.0	1.0
ROLE VALUES GRID							
Studying	2.5	0.6	2.0	2.5	3.0	4.0	1.0
Working	3.1	0.5	2.9	3.2	3.5	4.0	1.0
Community Services	2.3	0.7	1.9	2.4	2.9	4.0	1.0
Home and Family	3.1	0.5	2.9	3.3	3.6	4.0	1.0
Leisure Activities	2.8	0.5	2.5	2.9	3.3	4.0	1.0

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Figure 7

Salience Scales - Under 25 Years Old (N=57)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.6	0.4	2.4	2.7	3.0	3.8	1.3
Working	3.1	0.4	2.8	3.2	3.4	3.8	2.1
Community Services	1.6	0.5	1.2	1.6	1.9	3.8	1.0
Home and Family	2.2	0.6	1.8	2.2	2.5	3.7	1.0
Leisure Activities	2.7	0.5	2.5	2.8	3.1	3.9	1.0
COMMITMENT							
Studying	2.8	0.5	2.6	2.8	3.3	4.0	1.6
Working	3.3	0.4	3.0	3.4	3.8	4.0	2.2
Community Services	2.1	0.6	1.6	2.1	2.6	3.4	1.0
Home and Family	2.7	0.8	1.9	2.9	3.6	4.0	1.1
Leisure Activities	3.0	0.5	2.6	3.0	3.4	4.0	1.5
ROLE VALUES GRID							
Studying	2.7	0.5	2.5	2.9	3.2	3.9	1.6
Working	3.3	0.3	3.0	3.4	3.6	4.0	2.1
Community Services	2.2	0.6	1.9	2.3	2.7	3.9	1.0
Home and Family	2.8	0.6	2.3	2.9	3.3	4.0	1.8
Leisure Activities	3.0	0.5	2.8	3.0	3.5	3.9	1.0

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Figure 8

Salience Scales - 25-30 Years Old (N=529)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.4	0.6	2.0	2.4	2.9	4.0	1.0
Working	3.0	0.5	2.7	3.1	3.4	4.0	1.0
Community Services	1.8	0.7	1.2	1.7	2.3	3.8	1.0
Home and Family	2.6	0.7	2.1	2.6	3.1	4.0	1.0
Leisure Activities	2.8	0.5	2.4	2.8	3.1	4.0	1.0
COMMITMENT							
Studying	2.7	0.7	2.2	2.7	3.1	4.0	1.0
Working	3.4	0.5	3.0	3.4	3.8	4.0	1.1
Community Services	2.3	0.8	1.7	2.2	2.8	4.0	1.0
Home and Family	3.3	0.7	2.9	3.5	3.9	4.0	1.0
Leisure Activities	3.0	0.6	2.5	3.0	3.4	4.0	1.2
ROLE VALUES GRID							
Studying	2.5	0.6	2.1	2.5	2.9	4.0	1.1
Working	3.2	0.5	2.9	3.2	3.5	4.0	1.2
Community Services	2.3	0.7	1.8	2.3	2.8	4.0	1.0
Home and Family	3.1	0.6	2.8	3.2	3.6	4.0	1.0
Leisure Activities	2.9	0.5	2.6	2.9	3.3	4.0	1.2

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Figure 9

Salience Scales - 31-44 Years Old (N=593)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	 50th	 75th	High	Low
PARTICIPATION							
Studying	2.5	0.7	1.9	2.5	3.0	4.0	1.0
Working	3.0	0.6	2.7	3.1	3.5	4.0	1.1
Community Services	2.0	0.7	1.3	1.9	2.5	4.0	1.0
Home and Family	2.9	0.6	2.4	3.0	3.3	4.0	1.0
Leisure Activities	2.6	0.6	2.2	2.7	3.0	4.0	1.0
COMMITMENT							
Studying	2.7	0.8	2.1	2.7	3.2	4.0	1.0
Working	3.3	0.5	3.0	3.5	3.8	4.0	1.1
Community Services	2.4	0.8	1.8	2.3	3.0	4.0	1.0
Home and Family	3.5	0.7	3.2	3.8	4.0	4.0	1.0
Leisure Activities	2.9	0.6	2.4	2.9	3.4	4.0	1.2
ROLE VALUES GRID							
Studying	2.5	0.7	2.0	2.5	3.0	4.0	1.0
Working	3.2	0.5	2.9	3.2	3.5	4.0	1.0
Community Services	2.4	0.8	1.9	2.4	2.9	4.0	1.0
Home and Family	3.3	0.5	2.9	3.4	3.7	4.0	1.0
Leisure Activities	2.9	0.6	2.4	2.9	3.3	4.0	1.0

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Figure 10

Salience Scales - 45-64 Years Old (N=212)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.6	0.7	2.1	2.6	3.1	4.0	1.1
Working	3.2	0.5	2.9	3.2	3.5	4.0	1.2
Community Services	2.2	0.7	1.7	2.1	2.7	3.9	1.0
Home and Family	2.9	0.6	2.4	2.9	3.4	4.0	1.1
Leisure Activities	2.7	0.6	2.2	2.7	3.1	4.0	1.1
COMMITMENT							
Studying	2.7	0.8	2.0	2.7	3.2	4.0	1.2
Working	3.3	0.6	3.0	3.5	3.8	4.0	1.1
Community Services	2.4	0.7	2.0	2.5	3.0	4.0	1.0
Home and Family	3.5	0.6	3.3	3.8	4.0	4.0	1.0
Leisure Activities	2.8	0.6	2.3	2.9	3.3	4.0	1.0
ROLE VALUES GRID							
Studying	2.5	0.7	1.9	2.4	3.0	4.0	1.0
Working	3.0	0.6	2.7	3.1	3.5	4.0	1.0
Community Services	2.4	0.7	2.0	2.4	3.0	3.9	1.0
Home and Family	3.2	0.6	2.9	3.3	3.6	4.0	1.5
Leisure Activities	2.9	0.6	2.5	3.0	3.4	4.0	1.0

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Figure 11

Salience Scales - 65 Years and Older (N=9)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.9	0.6	2.5	2.7	3.4	3.8	2.0
Working	2.8	0.8	2.0	2.9	3.6	3.8	1.6
Community Services	2.6	0.2	2.4	2.6	2.8	2.8	2.2
Home and Family	2.9	0.5	2.6	2.9	3.3	3.8	2.1
Leisure Activities	2.9	0.3	2.7	2.8	3.1	3.4	2.5
COMMITMENT							
Studying	2.8	0.8	2.4	2.7	3.5	4.0	1.7
Working	3.0	0.9	2.1	3.1	3.9	4.0	1.5
Community Services	3.0	0.4	2.8	3.0	3.3	3.7	2.4
Home and Family	3.6	0.4	3.2	3.6	4.0	4.0	3.0
Leisure Activities	2.9	0.6	2.6	2.9	3.4	4.0	2.1
ROLE VALUES GRID							
Studying	2.8	0.6	2.3	2.7	3.5	3.6	2.0
Working	2.2	1.5	1.0	2.5	3.6	4.0	1.0
Community Services	2.8	0.3	2.5	2.9	2.9	3.1	2.3
Home and Family	3.4	0.4	2.9	3.4	3.8	4.0	2.8
Leisure Activities	3.1	0.4	2.8	3.1	3.5	3.9	2.6

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Figure 12

Salience Scales - Staff Therapists (N=684)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.4	0.6	2.0	2.4	2.9	4.0	1.0
Working	3.0	0.5	2.7	3.1	3.4	4.0	1.2
Community Services	1.8	0.7	1.2	1.7	2.2	4.0	1.0
Home and Family	2.6	0.7	2.1	2.7	3.1	4.0	1.0
Leisure Activities	2.7	0.6	2.4	2.8	3.1	4.0	1.0
COMMITMENT							
Studying	2.7	0.7	2.2	2.7	3.2	4.0	1.0
Working	3.3	0.5	3.0	3.4	3.7	4.0	1.0
Community Services	2.2	0.7	1.6	2.2	2.7	4.0	1.0
Home and Family	3.3	0.8	2.9	3.6	3.9	4.0	1.0
Leisure Activities	3.0	0.6	2.5	3.0	3.4	4.0	1.2
ROLE VALUES GRID							
Studying	2.5	0.7	2.0	2.5	3.0	4.0	1.0
Working	3.2	0.5	2.9	3.2	3.5	4.0	1.0
Community Services	2.3	0.7	1.8	2.3	2.8	4.0	1.0
Home and Family	3.1	0.6	2.8	3.2	3.6	4.0	1.0
Leisure Activities	2.9	0.5	2.6	3.0	3.3	4.0	1.0

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Figure 13

Salience Scales - Clinical Supervisors and Service Leaders (N=71)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.5	0.7	2.1	2.5	3.0	3.9	1.0
Working	3.2	0.4	2.9	3.2	3.6	4.0	2.2
Community Services	2.0	0.7	1.4	1.9	2.6	3.9	1.0
Home and Family	2.5	0.7	2.1	2.5	2.9	4.0	1.1
Leisure Activities	2.8	0.6	2.4	2.7	3.1	4.0	1.3
COMMITMENT							
Studying	2.8	0.7	2.2	2.8	3.3	4.0	1.1
Working	3.5	0.5	3.0	3.6	3.9	4.0	2.4
Community Services	2.4	0.8	1.8	2.3	2.9	4.0	1.1
Home and Family	3.2	0.8	2.7	3.4	4.0	4.0	1.0
Leisure Activities	3.0	0.6	2.5	2.9	3.5	4.0	1.7
ROLE VALUES GRID							
Studying	2.6	0.7	2.1	2.5	3.1	4.0	1.3
Working	3.2	0.4	2.9	3.3	3.5	4.0	2.3
Community Services	2.4	0.7	1.9	2.4	3.1	3.9	1.0
Home and Family	3.0	0.7	2.6	3.1	3.6	4.0	1.1
Leisure Activities	3.0	0.5	2.6	3.1	3.4	4.0	2.0

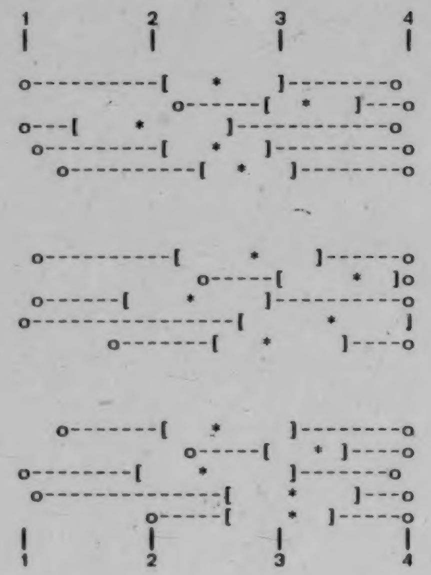

Figure 14

Salience Scales - Managerial Level (N=327)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.6	0.7	2.1	2.6	3.1	4.0	1.0
Working	3.3	0.5	2.9	3.3	3.6	4.0	1.1
Community Services	2.1	0.7	1.5	2.0	2.5	4.0	1.0
Home and Family	2.8	0.7	2.3	2.9	3.3	4.0	1.2
Leisure Activities	2.7	0.6	2.2	2.7	3.1	4.0	1.0
COMMITMENT							
Studying	2.8	0.7	2.2	2.8	3.3	4.0	1.0
Working	3.5	0.5	3.2	3.6	3.8	4.0	1.1
Community Services	2.4	0.8	1.9	2.4	3.0	4.0	1.0
Home and Family	3.5	0.7	3.1	3.8	4.0	4.0	1.0
Leisure Activities	2.9	0.7	2.4	2.9	3.4	4.0	1.0
ROLE VALUES GRID							
Studying	2.5	0.7	2.1	2.6	3.0	4.0	1.0
Working	3.2	0.5	2.9	3.3	3.6	4.0	1.0
Community Services	2.4	0.7	1.9	2.4	2.9	4.0	1.0
Home and Family	3.2	0.6	2.9	3.3	3.6	4.0	1.5
Leisure Activities	2.9	0.6	2.4	2.9	3.0	4.0	1.0

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Figure 15

Salience Scales - Private Practitioners and Consultants (N=80)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.5	0.7	1.9	2.5	3.2	4.0	1.0
Working	3.0	0.5	2.7	3.1	3.4	4.0	1.9
Community Services	2.1	0.7	1.4	2.0	2.7	3.9	1.0
Home and Family	3.0	0.5	2.5	3.0	3.4	4.0	1.6
Leisure Activities	2.8	0.5	2.5	2.8	3.1	3.9	1.3
COMMITMENT							
Studying	2.7	0.7	2.0	2.7	3.2	4.0	1.1
Working	3.4	0.5	3.0	3.4	3.8	4.0	1.6
Community Services	2.4	0.8	1.9	2.5	2.9	4.0	1.1
Home and Family	3.5	0.7	3.2	3.8	4.0	4.0	1.4
Leisure Activities	2.9	0.6	2.5	3.0	3.3	4.0	1.4
ROLE VALUES GRID							
Studying	2.5	0.7	2.1	2.5	3.1	3.9	1.1
Working	3.2	0.4	3.0	3.3	3.5	4.0	1.9
Community Services	2.4	0.8	1.6	2.5	3.1	3.6	1.0
Home and Family	3.2	0.5	3.0	3.4	3.6	4.0	1.7
Leisure Activities	2.9	0.5	2.6	2.9	3.3	3.8	1.1

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Figure 16

Salience Scales - Faculty Member/Researchers (N=44)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	3.1	0.7	2.7	3.3	3.6	4.0	1.2
Working	3.5	0.4	3.2	3.6	3.8	4.0	1.9
Community Services	2.2	0.8	1.5	2.1	2.8	3.8	1.0
Home and Family	2.8	0.7	2.3	3.0	3.3	4.0	1.1
Leisure Activities	2.5	0.6	2.0	2.5	3.0	3.8	1.4
COMMITMENT							
Studying	3.3	0.7	2.7	3.6	3.9	4.0	1.3
Working	3.6	0.4	3.4	3.8	4.0	4.0	2.8
Community Services	2.6	0.8	1.8	2.6	3.3	4.0	1.0
Home and Family	3.6	0.6	3.1	3.9	4.0	4.0	1.6
Leisure Activities	2.8	0.7	2.1	3.0	3.3	4.0	1.3
ROLE VALUES GRID							
Studying	3.0	0.7	2.5	3.1	3.6	4.0	1.3
Working	3.3	0.4	3.2	3.5	3.7	4.0	2.1
Community Services	2.6	0.8	2.1	2.5	3.4	3.8	1.0
Home and Family	3.3	0.6	3.1	3.5	3.7	4.0	1.8
Leisure Activities	3.0	0.6	2.7	3.1	3.6	4.0	1.8

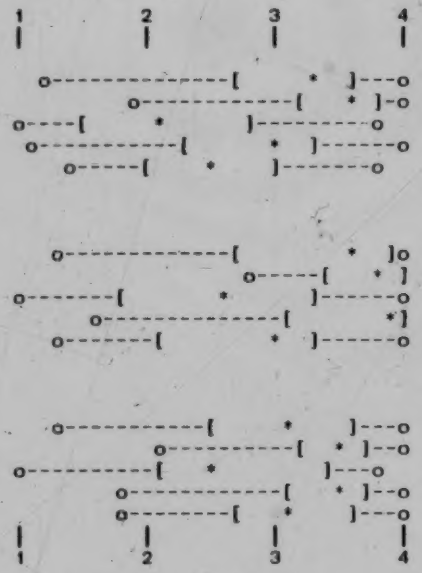

Figure 17

Salience Scales - On Leave/Not Employed in Field (N=164)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.3	0.7	1.8	2.3	2.9	4.0	1.0
Working	2.4	0.7	1.8	2.5	3.0	4.0	1.1
Community Services	2.0	0.8	1.4	1.9	2.7	3.9	1.0
Home and Family	3.0	0.6	2.6	3.1	3.4	4.0	1.0
Leisure Activities	2.6	0.6	2.1	2.6	3.0	4.0	1.2
COMMITMENT							
Studying	2.5	0.7	2.0	2.5	3.0	4.0	1.0
Working	3.0	0.6	2.6	3.0	3.5	4.0	1.6
Community Services	2.5	0.8	2.0	2.4	3.1	4.0	1.2
Home and Family	3.5	0.6	3.3	3.8	4.0	4.0	1.2
Leisure Activities	2.8	0.6	2.3	2.8	3.2	4.0	1.4
ROLE VALUES GRID							
Studying	2.4	0.7	1.9	2.4	2.8	4.0	1.0
Working	2.8	0.7	2.5	2.9	3.2	4.0	1.0
Community Services	2.4	0.7	1.9	2.4	2.9	4.0	1.0
Home and Family	3.3	0.5	3.0	3.4	3.7	4.0	1.8
Leisure Activities	2.8	0.6	2.3	2.8	3.2	4.0	1.5

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Figure 18

Salience Scales - Retired (N=30)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.5	0.7	2.0	2.6	3.0	3.8	1.2
Working	2.9	0.8	2.3	3.1	3.5	3.9	1.3
Community Services	2.3	0.8	1.8	2.4	2.8	3.8	1.0
Home and Family	2.9	0.7	2.4	3.0	3.3	4.0	1.0
Leisure Activities	2.6	0.6	2.3	2.7	3.0	4.0	1.2
COMMITMENT							
Studying	2.5	0.7	1.8	2.6	3.0	3.7	1.3
Working	3.4	0.8	2.8	3.8	3.9	4.0	1.5
Community Services	2.7	0.8	2.2	2.6	3.2	4.0	1.4
Home and Family	3.5	0.8	3.2	3.8	4.0	4.0	1.0
Leisure Activities	2.9	0.5	2.6	2.9	3.2	4.0	2.0
ROLE VALUES GRID							
Studying	2.4	0.6	1.9	2.5	2.9	3.6	1.1
Working	3.0	0.9	2.6	3.3	3.6	3.8	1.0
Community Services	2.5	0.8	2.0	2.7	3.1	3.9	1.0
Home and Family	3.0	0.8	2.8	3.2	3.6	4.0	1.0
Leisure Activities	2.8	0.5	2.4	3.0	3.1	3.7	1.6

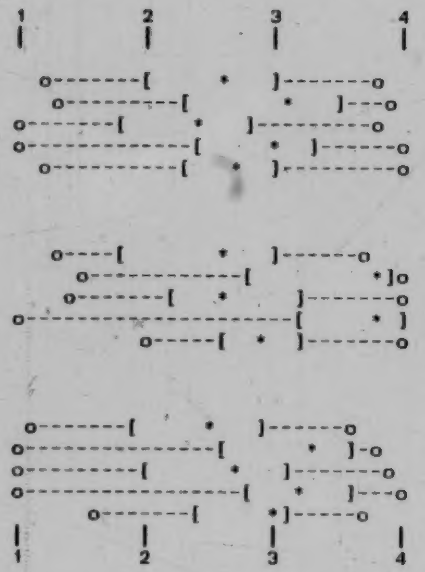

Figure 18

Salience Scales - Diploma Level (N=372)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles				
			25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.4	0.7	1.9	2.3	2.8	4.0	1.0
Working	3.0	0.6	2.7	3.0	3.5	4.0	1.2
Community Services	2.1	0.8	1.4	2.0	2.6	4.0	1.0
Home and Family	3.0	0.5	2.6	3.0	3.4	4.0	1.0
Leisure Activities	2.7	0.6	2.2	2.7	3.1	4.0	1.0
COMMITMENT							
Studying	2.5	0.7	1.9	2.6	3.0	4.0	1.0
Working	3.3	0.6	3.0	3.5	3.8	4.0	1.1
Community Services	2.4	0.8	1.8	2.4	3.0	4.0	1.0
Home and Family	3.6	0.5	3.4	3.8	4.0	4.0	1.1
Leisure Activities	2.9	0.6	2.4	2.9	3.4	4.0	1.0
ROLE VALUES GRID							
Studying	2.3	0.7	1.8	2.3	2.9	4.0	1.0
Working	3.0	0.6	2.8	3.1	3.5	4.0	1.0
Community Services	2.4	0.7	1.8	2.4	2.9	4.0	1.0
Home and Family	3.3	0.5	3.0	3.4	3.6	4.0	1.0
Leisure Activities	2.9	0.6	2.4	2.9	3.4	4.0	1.0

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Figure 20

Salience Scales - Baccalaureate Level (N=950)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.4	0.7	2.0	2.5	3.0	4.0	1.0
Working	3.0	0.6	2.7	3.1	3.4	4.0	1.1
Community Services	1.9	0.7	1.2	1.8	2.3	4.0	1.0
Home and Family	2.7	0.7	2.1	2.7	3.2	4.0	1.0
Leisure Activities	2.7	0.6	2.4	2.7	3.1	4.0	1.0
COMMITMENT							
Studying	2.7	0.7	2.2	2.7	3.2	4.0	1.0
Working	3.3	0.5	3.0	3.4	3.8	4.0	1.1
Community Services	2.3	0.7	1.7	2.3	2.8	4.0	1.0
Home and Family	3.3	0.8	2.9	3.6	3.9	4.0	1.0
Leisure Activities	2.9	0.6	2.5	3.0	3.4	4.0	1.0
ROLE VALUES GRID							
Studying	2.5	0.6	2.1	2.6	3.0	4.0	1.0
Working	3.1	0.5	2.9	3.2	3.5	4.0	1.0
Community Services	2.3	0.7	1.9	2.4	2.9	4.0	1.0
Home and Family	3.1	0.6	2.8	3.2	3.6	4.0	1.0
Leisure Activities	2.9	0.5	2.6	2.9	3.3	4.0	1.0

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Figure 21

Salience Scales - Master's Level (N=64)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
PARTICIPATION							
Studying	3.1	0.6	2.7	3.3	3.7	4.0	1.2
Working	3.3	0.5	3.0	3.4	3.8	4.0	1.8
Community Services	2.3	0.8	1.6	2.3	3.0	3.8	1.0
Home and Family	2.8	0.7	2.3	3.0	3.4	4.0	1.0
Leisure Activities	2.5	0.7	2.1	2.5	3.0	4.0	1.1
COMMITMENT							
Studying	3.3	0.7	2.8	3.5	3.9	4.0	1.3
Working	3.6	0.4	3.4	3.8	3.9	4.0	2.6
Community Services	2.7	0.9	2.1	2.6	3.4	4.0	1.0
Home and Family	3.4	0.7	2.9	3.8	4.0	4.0	1.0
Leisure Activities	2.8	0.7	2.2	2.9	3.2	4.0	1.3
ROLE VALUES GRID							
Studying	3.0	0.6	2.6	3.1	3.4	4.0	1.3
Working	3.4	0.4	3.2	3.4	3.7	4.0	2.2
Community Services	2.6	0.8	1.9	2.6	3.2	4.0	1.0
Home and Family	3.2	0.6	2.8	3.4	3.7	4.0	1.5
Leisure Activities	2.9	0.6	2.4	3.0	3.4	4.0	1.1

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1           2           3           4
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Figure 22

Salience Scales - Doctoral Level (N=7)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
PARTICIPATION							
Studying	2.8	1.0	1.7	3.3	3.5	3.9	1.3
Working	3.3	0.5	3.2	3.4	3.7	4.0	2.3
Community Services	2.2	0.9	1.5	1.9	3.2	3.5	1.1
Home and Family	2.6	0.7	2.0	2.5	3.3	3.7	1.6
Leisure Activities	2.2	0.8	1.9	2.0	2.3	3.8	1.3
COMMITMENT							
Studying	2.9	0.7	2.3	2.9	3.6	4.0	2.0
Working	3.8	0.2	3.5	3.8	4.0	4.0	3.4
Community Services	2.7	0.8	2.1	3.2	3.3	3.5	1.5
Home and Family	3.4	0.7	2.5	3.7	3.9	4.0	2.3
Leisure Activities	2.4	0.7	2.0	2.1	2.7	3.8	1.9
ROLE VALUES GRID							
Studying	3.1	0.7	2.8	2.9	3.9	4.0	2.0
Working	3.6	0.4	3.5	3.7	3.9	4.0	2.9
Community Services	3.0	0.6	2.2	3.3	3.4	3.6	2.1
Home and Family	3.2	0.6	2.7	3.5	3.7	4.0	2.6
Leisure Activities	3.1	3.3	2.9	3.0	3.1	3.7	2.6

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Research Question 2A: To determine the relative importance that occupational therapists ascribe to twenty values as delineated in the Life Roles Inventory.

In Figure 23, the results of the values section of the Life Roles Inventory are presented (the definitions for each value scale are outlined in Appendix B). Fifty percent of the respondents in the total sample (N=1400) endorsed seven values between the 3.0 and 4.0 levels -- personal development, ability utilization, social relations, altruism, autonomy, achievement, and social interaction. These values are of greatest importance to respondents in this sample. Another 10 values are rated between 2.2 and 3.6; these are authority, creativity, economics, lifestyle, physical activity, prestige, social interaction, variety, working conditions, and cultural identity. Therefore, all these values can be considered to be of some importance to these respondents.

Risk is rated between 1.4 and 2.2 and physical prowess is rated between 1.2 and 2.0 by 50% of the total sample. Risk and physical prowess are of least importance to this sample of respondents. As a total group this sample of occupational therapists appears to be very homogeneous when mean scale scores alone are considered.

Research Question 2B: To compare this ranking across age ranges, position categories, and educational levels.

Values and Age

When respondents are grouped according to the five age ranges that correspond to Super's stages of vocational maturation the value ratings show little variation (Figures 24 - 28). Fifty percent of respondents across all age categories rate the following value scales between 3.0 and 4.0 important): personal development, social relations, ability utilization, achievement, and altruism. Autonomy is also rated at this level in all but the ≥ 65 years group (N=9), where it is slightly below (between 2.7 and 3.9).

The values that receive the lowest rating across all age groups, those scales that are rated between 1.2 and 2.6, are physical prowess and risk.

Fifty percent of respondents in the under-25 year group (N=57) indicate that advancement, aesthetics, physical activity, social interaction, variety, and working conditions are of greater importance than those in other age groups. Cultural identity is of less importance to those under 25 years in this sample.

Respondents between 25 and 30 years of age (N=529) displayed a very similar pattern of values to those in the next age category 31-41 years (N=593). In this sample of occupational therapists, the authority value tended to gradually increase up to and including the 45-64 year age group. It declined slightly for the small group in the 65 years and over category.

The social interaction value scale ratings gradually decreased across all age groups, being rated between 3.4 and 4.0 by 50% of the <25 year olds and between 2.7 and 3.0 by those ≥ 65 years. The importance of advancement and physical activity also gradually decreases as age increases. Aesthetics, creativity, and cultural identity value scales show little variation across age groups. All are rated between 2.0 and 3.6. However, creativity is of greater importance to the small group of ≥ 65 year olds (N=9) where it reaches the 4.0 level.

Values and Position Level

When respondents are grouped according to position level, the rating of the value scales does not vary greatly from the classification by age. Figures 29 to 35 demonstrate that personal development, ability utilization, achievement, altruism, autonomy, and social relations maintain the same level of importance (between 3.0 and 4.0) across all position categories, while the values receiving the lowest ratings are also the same, risk and physical prowess. Here 50% of respondents in each position level never rate them above 2.4 (some importance).

The importance of the authority value scale gradually increases as the level of responsibility in the position level appears to increase. Value scale patterns for respondents at the clinical supervisor/service leader (N=71) and managerial (N=327) levels are very similar. Autonomy and prestige are important rated between 2.8 and 4.0 by 50% of respondents in both groups. While creativity and economics (rated between 2.6 and 3.2) both assume greater importance for managers, the rating given to lifestyle (2.6 - 3.2) does not change. Both groups rate variety and working conditions in the same manner, between 2.2 and 3.2. The high degree of similarity observed in the value ratings by managers and other levels of supervisory personnel would seem to suggest that one category could have been used for all these respondents.

The faculty member/researcher group (N=44) reported the highest value ratings for personal development, autonomy, creativity, and ability utilization, each of these values being rated between 3.2 and 4.0. This group also rates advancement more highly than those in other position categories between 2.6 and 3.4.

Respondents at the private practitioner/consultant level (N=80) demonstrate some similarities to the value scale rating pattern of the faculty member/researcher group but their ratings are somewhat lower for personal development, autonomy, creativity, and ability utilization (between 3.1 and 3.8). Advancement is considerably lower for this position level, rated between 2.2 and 3.0. The ratings given to working conditions and variety by private practitioners and faculty members are almost identical.

The value scale ratings reported by those on leave or not employed in the field (N=164) are generally lower than those reported by retired respondents (N=30). Fifty percent of respondents rate advancement, aesthetics, variety, and authority between 2.1 (some importance) and 3.2 (important). The rating of the economic and lifestyle values showed only slight variation between these two groups, with the retired group being the higher.

Values and Educational Level

When respondents are grouped according to their level of education some internal variation is noted but the same general pattern is evident (Figures 36 - 39). The value scales that are rated between 3.0 and 4.0 remain unchanged: personal development, ability utilization, achievement, autonomy, social relations, and altruism. The value scales that are of least importance also remain the same, physical prowess and risk. Ratings on the advancement value scale gradually increase as the level of education rises (mean scores range from 2.5 at the diploma level to 3.0 at the doctoral level). A similar pattern is observed with authority, autonomy, and creativity, while the economics and lifestyle values are rated as important at each educational level (mean scores between 2.9 and 3.5).

Respondents at the diploma (N=372) and baccalaureate (N=950) levels demonstrate very similar value scale score patterns. Those at the baccalaureate level show a slightly higher rating on the advancement value scale (50% of baccalaureate respondents rated it between 2.4 and 3.2, while 50% of diploma level respondents rated it between 2.0 and 3.0). When value scales are rank-ordered and the six highest and six lowest value scale ratings are identified, both the groups with undergraduate level qualifications endorse the same values in a very similar manner.

Respondents at the master's (N=64) and doctoral (N=7) levels demonstrate a greater range of value scale scores and higher mean scale scores on all scales, with the exception of physical activity (2.7 - 2.9 at the undergraduate level, 2.5 - 2.6 at the graduate level), and physical prowess (1.6 - 1.7 at the undergraduate level, 1.2 - 1.5 at the graduate level). When the value scale scores are rank-ordered and six highest and six lowest value scale ratings are identified, both groups with graduate level education endorse the same values in a similar manner. Autonomy and creativity are of greater importance to doctoral level respondents. Mean scale scores of 4.0 and 3.8 at the doctoral level and 3.5 on both these scales at the master's level are noted. Social interaction is less important to doctoral level respondents, with a mean scale score of 2.5; 2.9 at the master's level. Ability utilization and achievement are very important values at both graduate education levels, rated between 3.2 and 4.0 by over 50% of these respondents. Variety and working conditions are of greater importance to doctoral level respondents, where mean scale scores of 3.3 and 3.1 are recorded (3.0 and 2.7) are the master's level equivalents).

In summary, when the relative importance of the value scales for the total group (N=1400) is considered, personal development, social relations, ability utilization, altruism, autonomy, and achievement are the most important. Risk and physical prowess are of little importance to this group and receive the lowest rating. Whether the group is subdivided by age, position, or educational level, these values maintain their original level of importance.

Occupational therapy respondents appear to be a very homogeneous group in terms of their values. Little variation is noted across age groups. The level of importance reported for social interaction and physical activity appears to gradually decrease as age increases, while that assigned to authority gradually increases for those under 65 years. Creativity is of greatest importance to the small group of ≥ 65 years.

When the group is divided according to position level, the relative importance of authority gradually increases with the level of responsibility. Value scale patterns for the clinical supervisor/service leader and managerial levels are so similar that one category could have been used for these respondents. Those on leave or no longer working in the field generally reported lower value scale scores than those who had retired.

When educational level is used to divide the group the level of importance assigned to advancement gradually increases with the level of education and similar patterns are observed with authority, autonomy, and creativity. Economics and lifestyle continue to be important to respondents regardless of the educational level. Only at the doctoral level is personal development not rated as the most important value; here autonomy assumes that position.

Figure 23

Value Scales - Total Sample (N=1400)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	25th	50th	75th	High	Low
			Percentiles				
Ability Utilization	3.4	0.4	3.0	3.4	3.8	4.0	2.0
Achievement	3.3	0.4	3.0	3.4	3.6	4.0	1.6
Advancement	2.6	0.6	2.2	2.6	3.2	4.0	1.0
Aesthetics	2.6	0.6	2.2	2.6	3.2	4.0	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	1.6
Authority	2.8	0.5	2.4	2.8	3.2	4.0	1.0
Autonomy	3.3	0.4	3.0	3.4	3.8	4.0	1.8
Creativity	3.1	0.5	2.8	3.2	3.6	4.0	1.2
Economics	3.0	0.5	2.6	3.0	3.4	4.0	1.0
Life Style	2.9	0.4	2.6	3.0	3.4	4.0	1.0
Personal Development	3.6	0.3	3.4	3.6	4.0	4.0	2.2
Physical Activity	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Prestige	3.0	0.5	2.8	3.0	3.4	4.0	1.0
Risk	1.8	0.6	1.4	1.8	2.2	4.0	1.0
Social Interaction	2.9	0.5	2.6	3.0	3.2	4.0	1.0
Social Relations	3.4	0.4	3.2	3.4	3.8	4.0	1.5
Variety	2.8	0.5	2.6	2.8	3.2	4.0	1.0
Working Conditions	2.7	0.6	2.4	2.8	3.2	4.0	1.0
Cultural Identity	2.5	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.6	0.5	1.2	1.6	2.0	4.0	1.0

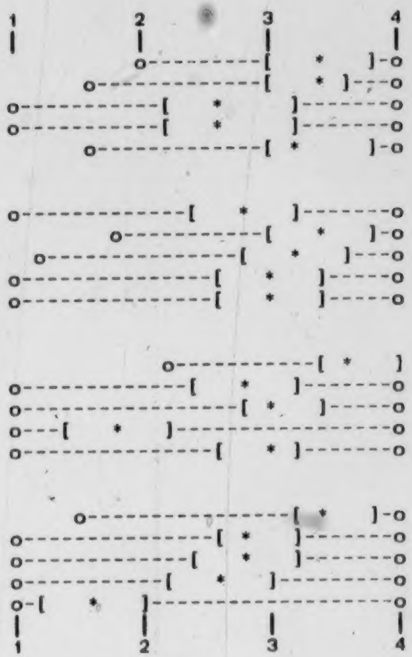

Figure 24

Value Scales - Under 25 Years Old (N=58)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.0	3.4	3.8	4.0	2.8
Achievement	3.4	0.3	3.2	3.4	3.6	4.0	2.8
Advancement	3.0	0.5	2.6	3.0	3.4	4.0	1.6
Aesthetics	2.9	0.6	2.6	3.0	3.2	4.0	1.0
Altruism	3.4	0.4	3.0	3.2	3.8	4.0	2.6
Authority	2.6	0.5	2.2	2.6	3.0	3.8	1.8
Autonomy	3.2	0.5	3.0	3.2	3.7	4.0	2.0
Creativity	3.3	0.6	2.9	3.4	3.8	4.0	1.4
Economics	3.0	0.5	2.8	3.0	3.4	4.0	1.4
Life Style	3.0	0.5	2.8	3.0	3.2	4.0	1.8
Personal Development	3.7	0.3	3.4	3.8	3.9	4.0	3.0
Physical Activity	3.1	0.6	2.6	3.2	3.6	4.0	1.6
Prestige	3.0	0.5	2.8	3.0	3.4	4.0	2.0
Risk	2.1	0.7	1.6	2.0	2.6	3.8	1.0
Social Interaction	3.3	0.5	3.0	3.2	3.7	4.0	1.8
Social Relations	3.6	0.4	3.4	3.6	4.0	4.0	2.4
Variety	3.0	0.5	2.8	3.0	3.4	4.0	1.8
Working Conditions	2.9	0.5	2.6	2.8	3.1	4.0	2.0
Cultural Identity	2.5	0.6	2.0	2.4	2.8	4.0	1.2
Physical Prowess	1.7	0.6	1.2	1.6	2.2	3.2	1.0

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Figure 25

Value Scales - 25-30 Years Old (N=529)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.0	3.4	3.8	4.0	2.2
Achievement	3.4	0.4	3.0	3.4	3.6	4.0	1.8
Advancement	2.7	0.6	2.4	2.8	3.2	4.0	1.0
Aesthetics	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	1.8
Authority	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Autonomy	3.4	0.4	3.0	3.4	3.8	4.0	1.8
Creativity	3.2	0.5	2.8	3.2	3.6	4.0	1.6
Economics	3.1	0.5	2.8	3.0	3.4	4.0	1.2
Life Style	3.0	0.5	2.6	3.0	3.4	4.0	1.2
Personal Development	3.6	0.3	3.4	3.6	4.0	4.0	2.6
Physical Activity	2.9	0.6	2.4	3.0	3.4	4.0	1.2
Prestige	3.1	0.6	2.8	3.0	3.6	4.0	1.2
Risk	1.8	0.6	1.4	1.8	2.2	4.0	1.0
Social Interaction	3.0	0.5	2.6	3.0	3.4	4.0	1.2
Social Relations	3.5	0.4	3.2	3.6	3.8	4.0	1.5
Variety	2.9	0.6	2.6	3.0	3.2	4.0	1.2
Working Conditions	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.6	0.6	1.2	1.6	2.0	4.0	1.0

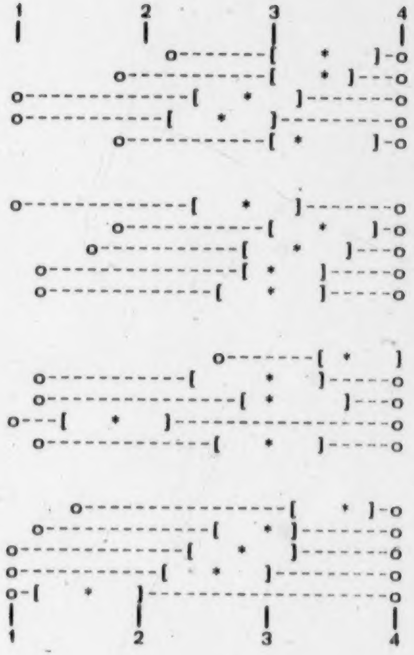

Figure 26

Value Scales - 31-44 Years Old (N=593)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.2	3.4	3.8	4.0	2.2
Achievement	3.3	0.4	3.0	3.4	3.6	4.0	2.0
Advancement	2.7	0.6	2.2	2.6	3.2	4.0	1.2
Aesthetics	2.6	0.7	2.2	2.6	3.1	4.0	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	1.6
Authority	2.9	0.6	2.4	3.0	3.4	4.0	1.2
Autonomy	3.4	0.5	3.0	3.4	3.8	4.0	1.8
Creativity	3.2	0.6	2.8	3.2	3.6	4.0	1.4
Economics	3.0	0.6	2.6	3.0	3.6	4.0	1.4
Life Style	3.0	0.5	2.6	3.0	3.4	4.0	1.0
Personal Development	3.6	0.3	3.4	3.6	4.0	4.0	2.6
Physical Activity	2.8	0.7	2.4	2.8	3.2	4.0	1.0
Prestige	3.1	0.5	2.8	3.0	3.4	4.0	1.0
Risk	1.9	0.6	1.4	1.8	2.2	4.0	1.0
Social Interaction	2.9	0.6	2.6	2.8	3.2	4.0	1.0
Social Relations	3.4	0.4	3.2	3.4	3.8	4.0	1.8
Variety	2.9	0.6	2.6	2.8	3.2	4.0	1.4
Working Conditions	2.7	0.6	2.4	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.6	0.6	1.2	1.4	2.0	4.0	1.0

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Figure 27

Value Scales - 45-64 Years Old (N=212)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.2	3.4	3.8	4.0	2.0
Achievement	3.3	0.5	3.0	3.4	3.6	4.0	1.6
Advancement	2.4	0.7	1.8	2.4	3.0	4.0	1.0
Aesthetics	2.8	0.7	2.3	2.8	3.2	4.0	1.2
Altruism	3.4	0.5	3.0	3.4	3.8	4.0	1.8
Authority	2.9	0.6	2.6	3.0	3.4	4.0	1.4
Autonomy	3.3	0.5	3.0	3.4	3.8	4.0	2.0
Creativity	3.2	0.6	2.8	3.2	3.6	4.0	1.2
Economics	3.0	0.6	2.6	3.0	3.4	4.0	1.0
Life Style	2.9	0.5	2.6	3.0	3.2	4.0	1.4
Personal Development	3.6	0.4	3.3	3.6	3.8	4.0	2.2
Physical Activity	2.7	0.6	2.2	2.6	3.0	4.0	1.2
Prestige	3.0	0.6	2.6	3.0	3.4	4.0	1.0
Risk	1.8	0.7	1.3	1.6	2.2	4.0	1.0
Social Interaction	2.8	0.6	2.4	2.8	3.2	4.0	1.4
Social Relations	3.3	0.5	3.0	3.4	3.8	4.0	1.6
Variety	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Working Conditions	2.7	0.6	2.2	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.6	0.5	1.2	1.6	2.0	4.0	1.0

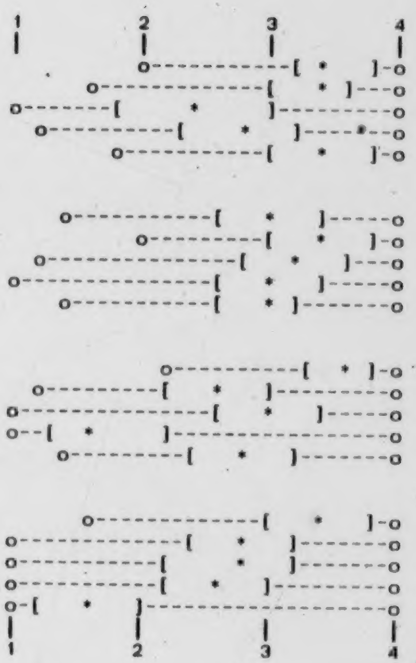

Figure 28

Value Scales - 65 Years and Older (N=9)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.6	0.4	3.2	3.6	3.9	4.0	3.0
Achievement	3.5	0.4	3.1	3.6	3.7	4.0	3.0
Advancement	2.7	0.5	2.3	2.6	3.1	3.6	2.2
Aesthetics	3.1	0.5	2.7	3.3	3.4	4.0	2.2
Altruism	3.3	0.5	3.0	3.4	3.7	4.0	2.4
Authority	2.8	0.5	2.4	2.8	3.2	3.6	2.2
Autonomy	3.3	0.6	2.7	3.4	3.9	4.0	2.6
Creativity	3.3	0.7	2.8	3.4	4.0	4.0	2.0
Economics	3.1	0.6	2.6	3.2	3.6	4.0	2.4
Life Style	2.9	0.5	2.5	3.0	3.3	3.4	2.0
Personal Development	3.6	0.3	3.4	3.6	3.8	4.0	3.2
Physical Activity	2.5	0.5	2.2	2.4	2.9	3.0	1.6
Prestige	3.0	0.4	2.6	3.2	3.3	3.4	2.6
Risk	1.9	0.6	1.1	2.2	2.4	2.4	1.1
Social Interaction	2.8	0.4	2.7	2.8	3.0	3.4	2.7
Social Relations	3.4	0.5	2.9	3.4	3.8	4.0	2.9
Variety	3.0	0.7	2.4	3.0	3.6	3.8	1.8
Working Conditions	3.0	0.7	2.7	3.0	3.4	4.0	1.8
Cultural Identity	2.8	0.6	2.3	2.6	3.1	4.0	2.0
Physical Prowess	1.5	0.5	1.2	1.3	2.1	2.2	1.0

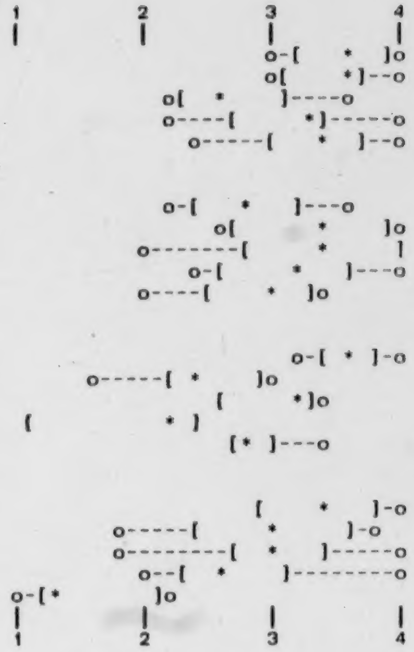

Figure 29

Value Scales - Staff Therapists (N=684)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.0	3.4	3.8	4.0	2.2
Achievement	3.3	0.4	3.0	3.4	3.6	4.0	1.6
Advancement	2.7	0.6	2.2	2.8	3.2	4.0	1.0
Aesthetics	2.7	0.7	2.2	2.6	3.2	4.0	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	1.8
Authority	2.7	0.6	2.4	2.8	3.0	4.0	1.0
Autonomy	3.3	0.4	3.0	3.2	3.8	4.0	2.0
Creativity	3.1	0.6	2.8	3.2	3.6	4.0	1.2
Economics	3.1	0.6	2.8	3.0	3.6	4.0	1.2
Life Style	3.0	0.5	2.6	3.0	3.4	4.0	1.0
Personal Development	3.6	0.3	3.4	3.6	4.0	4.0	2.6
Physical Activity	2.9	0.6	2.4	3.0	3.4	4.0	1.0
Prestige	3.1	0.6	2.8	3.0	3.6	4.0	1.2
Risk	1.8	0.6	1.4	1.8	2.2	3.8	1.0
Social Interaction	3.0	0.5	2.6	3.0	3.4	4.0	1.0
Social Relations	3.5	0.4	3.2	3.6	3.8	4.0	1.5
Variety	2.9	0.6	2.4	2.9	3.2	4.0	1.0
Working Conditions	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.7	0.6	1.2	1.6	2.0	3.6	1.0

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Figure 30

Value Scales - Clinical Supervisors and Service Leaders (N=71)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.5	0.4	3.2	3.6	3.8	4.0	2.2
Achievement	3.3	0.4	3.0	3.4	3.6	4.0	2.0
Advancement	2.8	0.7	2.4	2.8	3.2	4.0	1.2
Aesthetics	2.7	0.7	2.2	2.6	3.0	4.0	1.2
Altruism	3.3	0.5	3.0	3.4	3.8	4.0	2.2
Authority	3.0	0.6	2.6	3.0	3.4	4.0	1.2
Autonomy	3.5	0.5	3.0	3.6	4.0	4.0	1.8
Creativity	3.3	0.6	3.0	3.4	3.8	4.0	1.6
Economics	3.1	0.5	2.8	3.2	3.4	4.0	1.6
Life Style	3.0	0.5	2.6	3.0	3.2	4.0	1.8
Personal Development	3.6	0.4	3.4	3.8	4.0	4.0	2.8
Physical Activity	3.0	0.6	2.6	3.0	3.3	4.0	1.2
Prestige	3.1	0.6	2.8	3.2	3.6	4.0	1.4
Risk	1.9	0.6	1.4	1.8	2.2	4.0	1.0
Social Interaction	3.0	0.5	2.6	3.0	3.2	4.0	1.6
Social Relations	3.5	0.5	3.0	3.6	4.0	4.0	2.0
Variety	2.9	0.4	2.8	3.0	3.2	4.0	1.8
Working Conditions	2.8	0.6	2.4	2.8	3.2	4.0	1.2
Cultural Identity	2.6	0.6	2.2	2.6	3.2	3.8	1.0
Physical Prowess	1.6	0.5	1.2	1.4	2.0	3.0	1.0

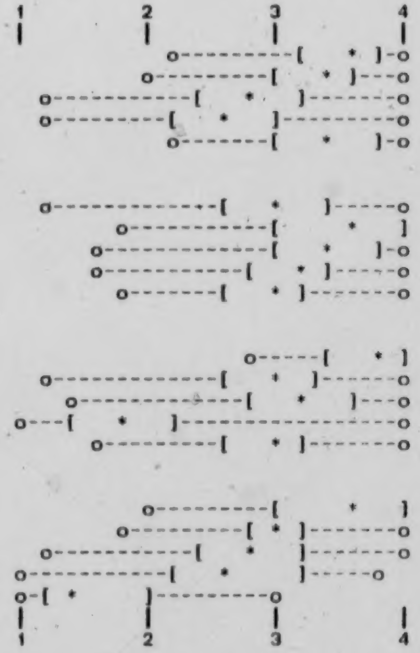

Figure 31

Value Scales - Managerial Level (N=327)
Means, Standard Deviations, and Percentiles

			Percentiles				
	Mean	S.D.	25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.2	3.4	3.8	4.0	2.0
Achievement	3.4	0.4	3.2	3.4	3.8	4.0	2.2
Advancement	2.7	0.7	2.2	2.8	3.2	4.0	1.0
Aesthetics	2.7	0.7	2.2	2.6	3.2	4.0	1.0
Altruism	3.4	0.5	3.0	3.4	3.8	4.0	1.8
Authority	3.1	0.5	2.8	3.0	3.4	4.0	1.4
Autonomy	3.4	0.4	3.0	3.4	3.8	4.0	2.0
Creativity	3.2	0.5	2.8	3.2	3.6	4.0	1.4
Economics	3.1	0.6	2.8	3.0	3.6	4.0	1.4
Life Style	3.0	0.5	2.6	3.0	3.2	4.0	1.2
Personal Development	3.6	0.4	3.4	3.6	4.0	4.0	2.4
Physical Activity	2.8	0.7	2.2	2.8	3.2	4.0	1.0
Prestige	3.1	0.5	2.8	3.2	3.6	4.0	1.0
Risk	1.9	0.7	1.4	1.8	2.4	4.0	1.0
Social Interaction	2.9	0.6	2.6	2.8	3.2	4.0	1.0
Social Relations	3.4	0.5	3.2	3.4	3.8	4.0	1.6
Variety	2.9	0.6	2.6	2.8	3.2	4.0	1.2
Working Conditions	2.7	0.7	2.2	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.7	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.7	0.6	1.2	1.6	2.0	4.0	1.0

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Figure 32

Value Scales - Faculty Member/Researcher (N=44)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.5	0.4	3.2	3.6	4.0	4.0	2.6
Achievement	3.5	0.4	3.0	3.4	3.8	4.0	2.6
Advancement	2.9	0.5	2.6	3.0	3.4	4.0	1.4
Aesthetics	2.7	0.6	2.4	2.6	3.0	4.0	1.4
Altruism	3.3	0.6	3.0	3.2	3.8	4.0	2.0
Authority	3.0	0.5	2.6	3.0	3.4	4.0	2.0
Autonomy	3.5	0.5	3.2	3.8	4.0	4.0	2.6
Creativity	3.5	0.6	3.2	3.7	4.0	4.0	1.8
Economics	2.9	0.5	2.8	3.0	3.4	4.0	2.0
Life Style	3.1	0.5	2.8	3.2	3.6	4.0	2.0
Personal Development	3.7	0.3	3.6	3.8	4.0	4.0	3.0
Physical Activity	2.6	0.6	2.0	2.6	3.2	3.6	1.6
Prestige	3.2	0.5	2.8	3.2	3.6	4.0	2.0
Risk	2.0	0.6	1.6	2.1	2.4	3.8	1.0
Social Interaction	2.9	0.4	2.6	2.8	3.2	3.8	2.0
Social Relations	3.5	0.4	3.2	3.6	3.8	4.0	2.0
Variety	3.0	0.6	2.6	3.0	3.4	4.0	1.8
Working Conditions	2.7	0.6	2.2	2.8	3.0	3.8	1.4
Cultural Identity	2.6	0.5	2.2	2.6	3.0	3.6	1.4
Physical Prowess	1.4	0.5	1.0	1.2	1.4	3.0	1.0

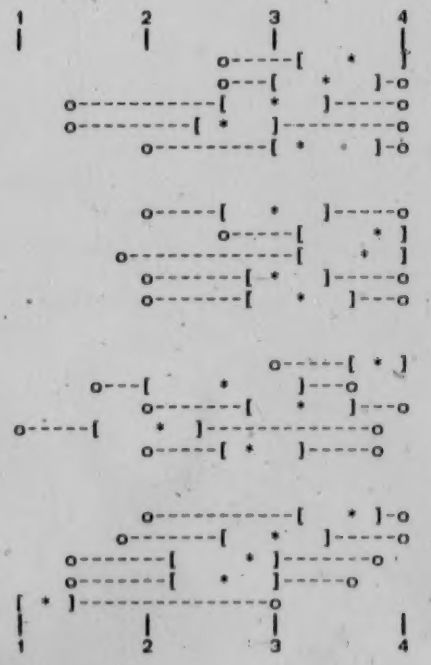

Figure 33

Value Scales - Private Practitioners and Consultants (N=80)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	25th	50th	75th	High	Low
			Percentiles				
Ability Utilization	3.4	0.4	3.2	3.4	3.8	4.0	2.6
Achievement	3.4	0.4	3.1	3.4	3.6	4.0	2.6
Advancement	2.5	0.6	2.2	2.6	3.0	4.0	1.2
Aesthetics	2.6	0.7	2.2	2.6	3.2	4.0	1.2
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	2.0
Authority	2.8	0.6	2.4	2.8	3.2	4.0	1.4
Autonomy	3.4	0.5	3.0	3.4	3.8	4.0	1.8
Creativity	3.2	0.6	2.8	3.2	3.6	4.0	1.4
Economics	2.7	0.6	2.3	2.8	3.2	4.0	1.0
Life Style	3.0	0.5	2.8	3.0	3.4	4.0	1.4
Personal Development	3.6	0.3	3.2	3.6	3.8	4.0	2.6
Physical Activity	2.8	0.7	2.4	2.8	3.2	4.0	1.4
Prestige	3.0	0.6	2.6	3.0	3.6	4.0	1.0
Risk	1.8	0.6	1.4	1.8	2.2	4.0	1.0
Social Interaction	2.8	0.5	2.5	2.8	3.2	4.0	1.6
Social Relations	3.3	0.5	3.0	3.4	3.6	4.0	2.2
Variety	2.9	0.5	2.6	3.0	3.4	4.0	1.4
Working Conditions	2.5	0.6	2.1	2.6	3.0	4.0	1.0
Cultural Identity	2.5	0.6	2.0	2.6	3.0	4.0	1.0
Physical Prowess	1.6	0.5	1.2	1.6	1.8	3.2	1.0

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Figure 34

Value Scales - On Leave/Not Employed in Field (N=164)
Means, Standard Deviations, and Percentiles

				Percentiles			
	Mean	S.D.	25th	50th	75th	High	Low
Ability Utilization	3.3	0.4	3.0	3.4	3.6	4.0	2.0
Achievement	3.3	0.4	3.0	3.2	3.6	4.0	2.0
Advancement	2.5	0.6	2.1	2.6	2.8	4.0	1.2
Aesthetics	2.5	0.6	2.2	2.5	3.0	4.0	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	1.6
Authority	2.8	0.6	2.4	2.8	3.2	4.0	1.2
Autonomy	3.2	0.5	3.0	3.2	3.6	4.0	2.0
Creativity	3.0	0.6	2.6	3.0	3.4	4.0	1.4
Economics	2.9	0.6	2.6	3.0	3.2	4.0	1.4
Life Style	2.9	0.5	2.5	2.8	3.2	4.0	1.4
Personal Development	3.6	0.4	3.4	3.6	3.8	4.0	2.2
Physical Activity	2.7	0.7	2.2	2.6	3.2	4.0	1.2
Prestige	2.9	0.5	2.6	3.0	3.4	4.0	1.8
Risk	1.6	0.6	1.2	1.5	2.0	3.8	1.0
Social Interaction	2.8	0.6	2.4	2.8	3.2	4.0	1.4
Social Relations	3.4	0.4	3.0	3.4	3.8	4.0	1.8
Variety	2.7	0.6	2.4	2.8	3.0	4.0	1.4
Working Conditions	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.7	2.1	2.6	3.0	4.0	1.0
Physical Prowess	1.7	0.7	1.2	1.6	2.2	3.8	1.0

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Figure 35

Value Scales - Retired (N=30)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.5	0.4	3.2	3.5	3.8	4.0	3.0
Achievement	3.4	0.4	3.2	3.4	3.8	4.0	2.6
Advancement	2.8	0.7	2.2	2.8	3.3	4.0	1.4
Aesthetics	2.5	0.7	2.1	2.4	3.1	3.8	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	2.2
Authority	3.1	0.5	2.8	3.0	3.6	4.0	2.4
Autonomy	3.4	0.4	3.0	3.4	3.8	4.0	2.6
Creativity	3.1	0.6	2.8	3.0	3.7	4.0	1.4
Economics	3.0	0.5	2.8	2.8	3.4	3.8	1.8
Life Style	3.0	0.5	2.6	2.9	3.4	4.0	2.2
Personal Development	3.6	0.3	3.4	3.6	3.9	4.0	3.0
Physical Activity	2.6	0.6	2.2	2.6	3.1	4.0	1.2
Prestige	3.2	0.5	3.0	3.1	3.6	4.0	1.8
Risk	1.9	0.6	1.2	2.2	2.3	3.2	1.0
Social Interaction	2.9	0.5	2.6	3.0	3.2	4.0	1.8
Social Relations	3.3	0.4	3.0	3.4	3.6	4.0	2.2
Variety	2.8	0.4	2.6	2.8	3.2	3.8	2.0
Working Conditions	2.7	0.6	2.4	2.8	3.2	3.6	1.6
Cultural Identity	2.5	0.5	2.2	2.4	2.8	4.0	1.6
Physical Prowess	1.5	0.5	1.2	1.4	1.9	3.0	1.0

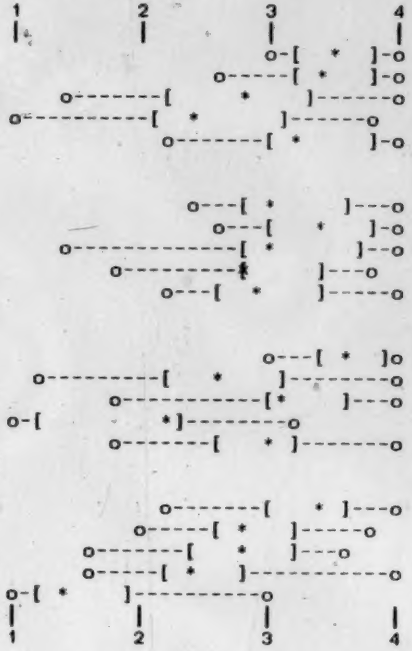

Figure 36

Value Scales - Diploma Level (N=372)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.0	3.4	3.8	4.0	2.0
Achievement	3.2	0.5	3.0	3.2	3.6	4.0	1.6
Advancement	2.5	0.7	2.0	2.4	3.0	4.0	1.0
Aesthetics	2.7	0.7	2.2	2.6	3.2	4.0	1.0
Altruism	3.4	0.5	3.0	3.4	3.8	4.0	1.8
Authority	2.3	0.6	2.6	2.8	3.2	4.0	1.2
Autonomy	3.3	0.5	3.0	3.2	3.8	4.0	1.8
Creativity	3.1	0.6	2.8	3.2	3.6	4.0	1.2
Economics	3.0	0.6	2.6	3.0	3.4	4.0	1.0
Life Style	3.0	0.5	2.6	3.0	3.2	4.0	1.0
Personal Development	3.5	0.4	3.2	3.6	3.8	4.0	2.2
Physical Activity	2.7	0.6	2.2	2.6	3.0	4.0	1.0
Prestige	2.9	0.6	2.6	3.0	3.4	4.0	1.0
Risk	1.8	0.6	1.3	1.8	2.2	4.0	1.0
Social Interaction	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Social Relations	3.3	0.5	3.0	3.4	3.8	4.0	1.6
Variety	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Working Conditions	2.7	0.6	2.2	2.6	3.2	4.0	1.0
Cultural Identity	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.7	0.6	1.2	1.6	2.0	4.0	1.0

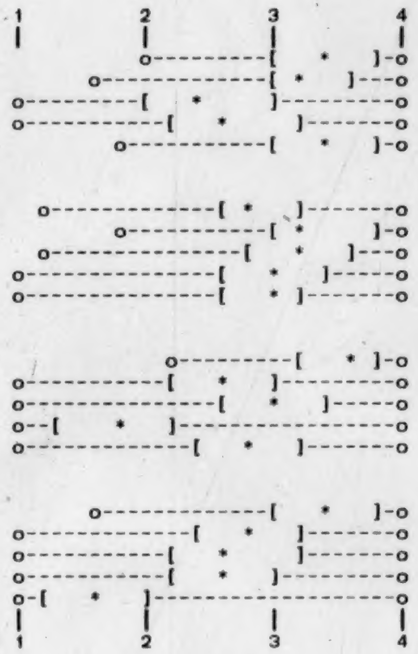

Figure 37

Value Scales - Baccalaureate Level (N=950)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	Percentiles 25th	50th	75th	High	Low
Ability Utilization	3.4	0.4	3.2	3.4	3.8	4.0	2.2
Achievement	3.4	0.4	3.0	3.4	3.6	4.0	1.8
Advancement	2.7	0.6	2.4	2.8	3.2	4.0	1.0
Aesthetics	2.6	0.7	2.2	2.6	3.0	4.0	1.0
Altruism	3.3	0.5	3.0	3.2	3.8	4.0	1.6
Authority	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Autonomy	3.4	0.5	3.0	3.4	3.8	4.0	1.8
Creativity	3.2	0.6	2.8	3.2	3.6	4.0	1.4
Economics	3.1	0.6	2.8	3.0	3.6	4.0	1.2
Life Style	3.0	0.5	2.6	3.0	3.4	4.0	1.2
Personal Development	3.6	0.3	3.4	3.8	4.0	4.0	2.6
Physical Activity	2.9	0.6	2.4	3.0	3.4	4.0	1.0
Prestige	3.1	0.5	2.8	3.0	3.6	4.0	1.4
Risk	1.8	0.6	1.4	1.8	2.2	4.0	1.0
Social Interaction	3.0	0.5	2.6	3.0	3.4	4.0	1.2
Social Relations	3.5	0.4	3.2	3.6	3.8	4.0	1.5
Variety	2.9	0.6	2.6	3.0	3.2	4.0	1.4
Working Conditions	2.8	0.6	2.4	2.8	3.2	4.0	1.0
Cultural Identity	2.6	0.6	2.2	2.6	3.0	4.0	1.0
Physical Prowess	1.6	0.6	1.2	1.5	2.0	3.8	1.0

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Figure 38

Value Scales - Master's Level (N=64)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	25th	50th	75th	High	Low
			Percentiles				
Ability Utilization	3.7	0.4	3.4	3.6	4.0	4.0	2.8
Achievement	3.5	0.4	3.2	3.5	3.8	4.0	2.8
Advancement	2.9	0.6	2.5	3.0	3.4	4.0	1.4
Aesthetics	2.8	0.7	2.4	2.6	3.4	4.0	1.0
Altruism	3.2	0.6	3.0	3.2	3.8	4.0	2.0
Authority	3.0	0.5	2.6	3.0	3.4	4.0	1.4
Autonomy	3.5	0.4	3.1	3.4	4.0	4.0	2.6
Creativity	3.5	0.6	3.2	3.6	4.0	4.0	2.2
Economics	3.0	0.6	2.4	2.8	3.2	4.0	1.8
Life Style	3.1	0.5	2.6	3.0	3.4	4.0	2.0
Personal Development	3.7	0.3	3.6	3.8	4.0	4.0	3.0
Physical Activity	2.5	0.6	2.0	2.5	3.0	4.0	1.2
Prestige	3.2	0.5	2.8	3.1	3.6	4.0	1.8
Risk	2.0	0.6	1.6	2.0	2.4	3.4	1.0
Social Interaction	2.9	0.5	2.6	3.0	3.2	4.0	1.6
Social Relations	3.5	0.4	3.2	3.6	3.8	4.0	2.0
Variety	3.0	0.6	2.6	3.0	3.4	4.0	1.6
Working Conditions	2.7	0.6	2.2	2.6	3.0	4.0	1.0
Cultural Identity	2.5	0.5	2.0	2.5	2.8	4.0	1.0
Physical Prowess	1.5	0.5	1.0	1.2	1.8	3.0	1.0

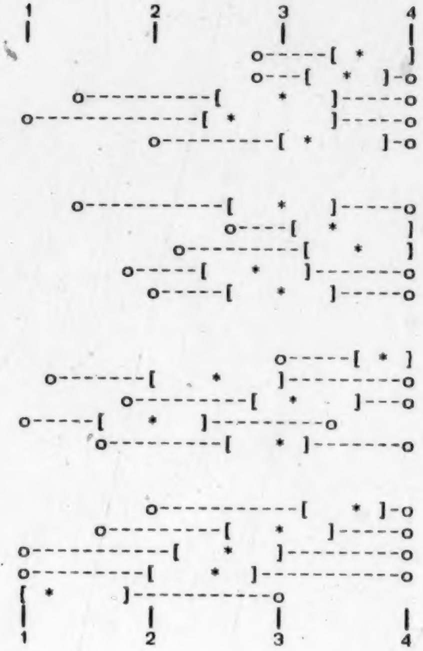
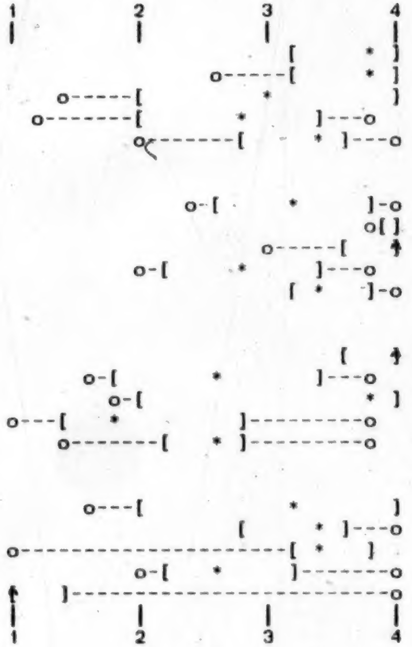


Figure 39

Value Scales - Doctoral Level (N=7)
Means, Standard Deviations, and Percentiles

	Mean	S.D.	25th	50th	75th	High	Low
			Percentiles				
Ability Utilization	3.7	0.4	3.2	3.8	4.0	4.0	3.2
Achievement	3.5	0.5	3.2	3.8	4.0	4.0	2.6
Advancement	3.0	1.0	2.0	3.0	4.0	4.0	1.4
Aesthetics	2.7	0.9	2.0	2.8	3.4	3.8	1.2
Altruism	3.2	0.7	2.8	3.4	3.6	4.0	2.0
Authority	3.2	0.6	2.6	3.2	3.8	4.0	2.4
Autonomy	4.0	0.1	4.0	4.0	4.0	4.0	3.8
Creativity	3.8	0.4	3.6	4.0	4.0	4.0	3.0
Economics	2.9	0.6	2.2	2.8	3.4	3.8	2.0
Life Style	3.5	0.3	3.2	3.4	3.8	4.0	3.2
Personal Development	3.9	0.2	3.6	4.0	4.0	4.0	3.6
Physical Activity	2.6	0.8	1.8	2.6	3.4	3.8	1.6
Prestige	3.2	1.0	2.0	3.8	4.0	4.0	1.8
Risk	2.1	1.0	1.4	1.8	2.8	3.8	1.0
Social Interaction	2.5	0.7	2.2	2.6	2.8	3.8	1.4
Social Relations	3.1	0.9	2.0	3.2	4.0	4.0	1.6
Variety	3.3	0.4	2.8	3.4	3.6	4.0	2.8
Working Conditions	3.1	1.0	3.2	3.4	3.8	3.8	1.0
Cultural Identity	2.7	0.5	2.2	2.6	3.2	4.0	2.0
Physical Prowess	1.2	0.3	1.0	1.0	1.4	4.0	1.0



Research Question 3A: To identify the level of job satisfaction reported by occupational therapists.

The results of the Minnesota Satisfaction Questionnaire (Short Form) are outlined in Figures 40 to 42. A mean score of 75.4 (SD 10.0) on the general satisfaction scale was reported by the total sample (N=1400). Therapists rate their level of satisfaction between neither satisfied or dissatisfied and satisfied (60 - 80). Fifty percent of these therapists rated their general level of job satisfaction between 70.0 and 82.0.

A mean score of 48.7 (SD 6.0) on the intrinsic satisfaction scale was reported by the total sample. Therapists rate their level of satisfaction with these elements of their career choice between satisfied and very satisfied (48 - 60). Fifty percent of these therapists rated their level of intrinsic satisfaction bewteen 46.0 and 53.0.

A mean score of 19.2 (SD 4.3) on the extrinsic satisfaction scale was reported by the total sample. Therapists rate their level of satisfaction with these elements between neither satisfied or dissatisfied and satisfied (18-24). Fifty percent of these therapists rated their level of extrinsic satisfaction between 16.0 and 22.8.

In summary, this sample of occupational therapists (N=1400) demonstrated a moderate level of general satisfaction with their career choice, and they are more satisfied with the intrinsic elements than the extrinsic elements of their jobs.

The second part of Research Question 3 outlines the level of job satisfaction reported when this sample is divided according to the three classification variables.

Research Question 3B: To compare the level of job satisfaction across age ranges, position categories, and educational levels.

Job Satisfaction and Age

When the respondents in this sample are grouped according to the five age ranges that correspond with Super's stages of vocational maturation, there is a gradual increase in the level of general satisfaction as age increases. Those under 25 years (N=57) have a mean score of 73.9 (SD 10.3). Fifty percent of this group have mean scores between 68.0 and 81.0. For those over 65 years (N=9) the mean score is 82.1 (SD 6.9) and 50% of them score between 78.0 and 89.0.

A similar trend is noted on both the intrinsic and extrinsic scales. On the intrinsic scale those under 25 years have a mean score of 47.1 (SD 6.7) and those over 65 years 53.0 (SD 5.0) while on the extrinsic scale the mean scores are 19.0 (SD 4.1) and 21.6 (SD 3.2) respectively.

Job Satisfaction and Position Level

When compared across position categories there are only slight differences but the trend towards a gradual increase in satisfaction with increased levels of responsibility is evident on the general satisfaction scale (Figures 40). Private practitioners and consultants (N=80) report a slightly higher level of satisfaction (mean 78.0, SD 10.9) than others in active practice (means ranged from 74.4 (SD 9.8) for staff therapists to 76.0 (SD 11.0) for faculty member/researcher). Retired therapists (N=30) report the highest level of general satisfaction with occupational therapy (mean 80.7, SD 10.6), while in comparison the other group of non-practicing therapists (those on leave, N=164) report a considerably lower level of satisfaction (mean 75.2, SD 10.0). Levels of intrinsic satisfaction remain higher across all position categories with very little variation between them (means ranged from 47.9 (SD 5.9) for staff therapists to 51.7 (SD 6.0) for retired therapists). Faculty members and researchers (N=44) report the highest level of intrinsic satisfaction (mean 49.8, SD 6.6) of those in active practice (Figure 42) and this is followed very closely by the managerial (N=327, mean 49.7, SD 5.5) and private practitioner/consultant (N=80, mean 49.4, SD 6.7) levels. Retired therapists (N=30) report higher levels of intrinsic satisfaction (mean 57.7, SD 6.0) than those who are on leave (N=164, mean 48.5, SD 6.0).

The rating given to extrinsic elements by those in active practice ranges from a low mean score of 18.8 (SD 4.4) reported by clinical supervisors and service leaders (N=71) to a high of 20.8 (SD 4.1) reported by private practitioners and consultants (N=80). Retired therapists (N=30) report the highest levels of extrinsic satisfaction (mean 21.3, SD 4.7).

Job Satisfaction and Educational Level

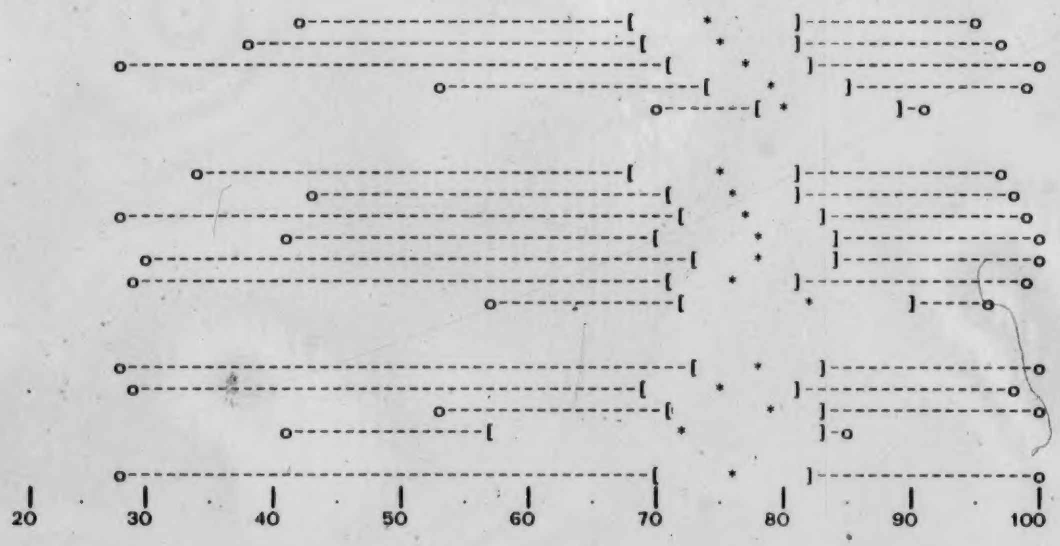
When job satisfaction is compared across educational levels, the diploma (N=372) and master's (N=64) level categories, report the highest level of general satisfaction with a mean of 77.1 (SD 10.4). This is followed by the baccalaureate (N=950, mean 74.7, SD 9.8) and the doctoral (N=7, mean 69.3, SD 16.2) levels.

A similar trend is noted on both the intrinsic and extrinsic scales. Diploma and master's level groups show slightly higher levels of intrinsic satisfaction with means of 49.5 (SD 6.0) and 50.1 (SD 5.9) respectively, while the doctoral level category reports the lower level (mean 47.9, SD 10.2). However, in each case with the substantially smaller number of respondents at the doctoral level a far wider range of scores is evident.

In summary, there appears to be a gradual increase in general satisfaction with age and with increasing levels of responsibility reflected within the position levels used in this descriptive study. Private practitioners and consultants (N=80) report slightly higher levels of general and extrinsic satisfaction than other groups engaged in active practice. Those on leave or no longer practicing (N=164) report lower levels of satisfaction than those who have retired (N=30) but do not differ appreciably from those in active practice on any of the satisfaction scales.

Figure 40

Results of Minnesota Satisfaction Questionnaire
General Satisfaction Scale



	Mean	S.D.	Percentile 25	Percentile 50	Percentile 75
AGE:					
< 25	73.9	10.3	68	74	81
25 - 30	74.2	9.2	69	75	81
31 - 44	75.6	10.6	71	77	82
45 - 64	78.3	9.3	74	79	85
≥ 65	82.1	6.9	78	80	89
POSITION:					
Staff Ther.	74.4	9.8	68	75	81
Supervisor	74.9	10.0	71	76	81
Manager	76.6	9.5	72	77	83
Faculty/Res.	76.0	11.0	70	78	84
Private/Cons.	78.0	10.9	73	78	84
Leave	75.2	10.0	71	76	81
Retired	80.7	10.6	72	82	90
EDUCATION:					
Diploma	77.1	10.0	73	78	83
Baccalaureate	74.7	9.8	69	75	81
Master's	77.1	10.4	71	79	83
Doctorate	69.3	16.2	57	72	83
TOTAL SAMPLE	75.4	10.0	70	76	82

Figure 41

Results of Minnesota Satisfaction Questionnaire
Extrinsic Satisfaction Scale

```
                                                                                                    Percentile
                                                                               Mean    S.D.       25    50    75

AGE:
  < 25                          o---------[      *     ]------------o          19.0    4.1        16    19    22
  25 - 30                 o---------------[      *     ]------------o          18.8    4.2        16    19    22
  31 - 44               o-----------------[       *     ]-------------o        19.2    4.6        16    20    23
  45 - 64                 o-------------------[     *     ]-----------o        20.3    4.3        18    21    24
  ≥ 65                                      o-[       *   ]---o                21.6    3.2        18    22    24

POSITION:
  Staff Ther.           o-----------------[      *     ]------------o          18.9    4.3        16    19    22
  Supervisor              o---------------[      *     ]------------o          18.8    4.4        16    19    22
  Manager               o-----------------[       *     ]-------------o        19.3    4.4        16    20    23
  Faculty/Res.                o---------[        *      ]-------------o        18.9    4.7        15    19    23
  Private/Cons.                     o---------[     *   ]-------------o        20.8    4.1        18    21    23
  Leave                   o-----------------[    *     ]--------------o        19.3    4.4        17    19    22
  Retired                 o-----------------[         *      ]----o            21.3    4.7        17    22    25

EDUCATION:
  Diploma               o-------------------[     *     ]-------------o        20.0    4.4        17    20    23
  Baccalaureate         o-----------------[      *     ]--------------o        18.9    4.3        16    19    22
  Master's                  o-----------[         *     ]-------------o        19.6    4.9        15    20    23
  Doctorate                   o-[             *           ]                    17.0    6.0        11    18    24

TOTAL SAMPLE            o-----------------[       *    ]--------------o        19.2    4.3        16    20    22
                    | . . . . | . . . . | . . . . | . . . . | . . . . |
                    5        10        15        20        25        30
```

Figure 42

Results of Minnesota Satisfaction Questionnaire
Intrinsic Satisfaction Scale

```
                                                                                              Percentile
                                                                          Mean    S.D.      25    50    75
AGE:
  < 25                       o-------------------[   *   ]----o           47.1     6.7      44    48    52
  25 - 30                     o-------------------[  *    ]------o        47.9     5.5      45    48    52
  31 - 44           o------------------------------[   * ]-------o        48.8     6.3      46    50    53
  45 - 64                          o----------------[  *  ]------o        50.4     5.1      47    50    54
  ≥ 65                                         o-------[   * ]o           53.0     5.0      50    54    56

POSITION:
  Staff Ther.              o----------------------[  *   ]-------o        47.9     5.9      45    48    52
  Supervisor                        o---------------[ *    ]----o         48.8     5.6      47    49    53
  Manager             o-----------------------------[  *   ]-----o        49.7     5.5      47    50    54
  Faculty/Res.                   o-----------------[   *   ]-----o        49.8     6.6      46    50    54
  Private/Cons.     o-------------------------------[  *  ]------o        49.4     6.7      47    50    53
  Leave                 o-------------------------[   *  ]-------o        48.5     6.0      45    49    52
  Retired                                  o--------[    *   ]---o        51.7     6.0      47    52    57

EDUCATION:
  Diploma           o-------------------------------[  *  ]------o        49.5     6.0      47    50    53
  Baccalaureate         o-------------------------[   *  ]-------o        48.3     5.9      45    49    52
  Master's                                 o---------[  *    ]-----o      50.1     5.9      46    50    54
  Doctorate                      o-------------[      *     ]--o          47.9    10.2      42    49    55

TOTAL SAMPLE        o------------------------------[  *   ]------o        48.7     6.0      46    49    53
                    |....|....|....|....|....|....|....|....|....|
                    15   20   25   30   35   40   45   50   55   60
```

Research Question 4A: To determine the accuracy of the assigned Holland Code for occupational therapy (S-R-E).

Table IV presents the mean raw scores for the Vocational Preference Inventory on the six scales used to compute the Holland Code.

Table IV

Results of Vocational Preference Inventory
(N=1400)

Scale	Mean	Median	S.D.
Realistic	2.5	2.0	2.4
Intellectual	5.5	5.0	3.9
Social	7.1	7.0	3.9
Conservative	1.7	1.0	2.5
Enterprising	3.5	3.0	3.2
Artistic	6.1	6.0	4.4

On the basis of mean raw scores the social scale remains the primary code for this sample of occupational therapists but neither the realistic nor enterprising scales are represented in the secondary codes. For this sample the artistic and intellectual scales replace them. On the basis of the mean raw scores reported in Table IV the Holland Code for occupational therapists in this sample (N=1400) would be S-A-I.

When the incidence of three-letter codes (the primary and secondary code combinations) was computed for all respondents, 106 codes were identified within this sample of occupational therapists. The assigned code (S-R-E) occurred twice and a closely related code (S-E-R) 18 times, indicating that the existing Holland Code combination only occurred 20 times (1.4%) in 1400 responses. The assigned code could not be replicated in this large sample and, therefore, is not considered to be appropriate for this occupational group. In Table V, the frequency of each of the six scales as the primary or first code is listed. Again, the social scale is the most frequent primary code, followed by the artistic and intellectual scales. A frequency distribution of the 1400 respondents was computed for the 106 three-letter codes, and the Holland Codes which occured more than forty times are presented in Table VI. Here the social and artistic scales are the most frequent primary codes. A combination of social, artistic, and intellectual scales account for 34.5% of respondents in this sample.

Table V

Occurrence of Scale in Primary Code Position

Scale	Frequency
Realistic	52 (3.70%)
Intellectual	320 (22.80%)
Social	574 (40.90%)
Conservative	22 (1.75%)
Enterprising	75 (5.35%)
Artistic	358 (25.50%)

Table VI

Occurrence of Holland Codes with Frequencies >40

Code	Frequency
S-A-I	96 (6.85%)
A-I-S	95 (6.78%)
A-S-I	81 (5.78%)
S-I-A	72 (5.14%)
I-S-A	71 (5.07%)
I-A-S	68 (4.85%)
S-E-A	61 (4.35%)
S-A-E	52 (3.71%)
S-I-E	48 (3.43%)
A-S-E	45 (3.21%)
S-I-R	43 (3.10%)
I-S-R	41 (2.93%)

Research Question 4B: To generate a Holland Code for occupational therapy on the basis of empirical data.

On the basis of the data presented in Tables V and VI some combination of the social, artistic, and intellectual scales represents the appropriate Holland Code for occupational therapy, as this accounts for (483) 34.5% of respondents. Another (290) 20.7% of respondents are accounted for when enterprising and realistic scales are represented in the secondary codes of these respondents.

Holland & Holland (1977) illustrated how the "typology can be used to estimate the range of personalities within an occupation or field of study" (p. 226). Using this system, Figure 43 was prepared to illustrate the distribution of the 106 Holland Codes identified within this sample.

Figure 43

Distribution of S-R-E Code

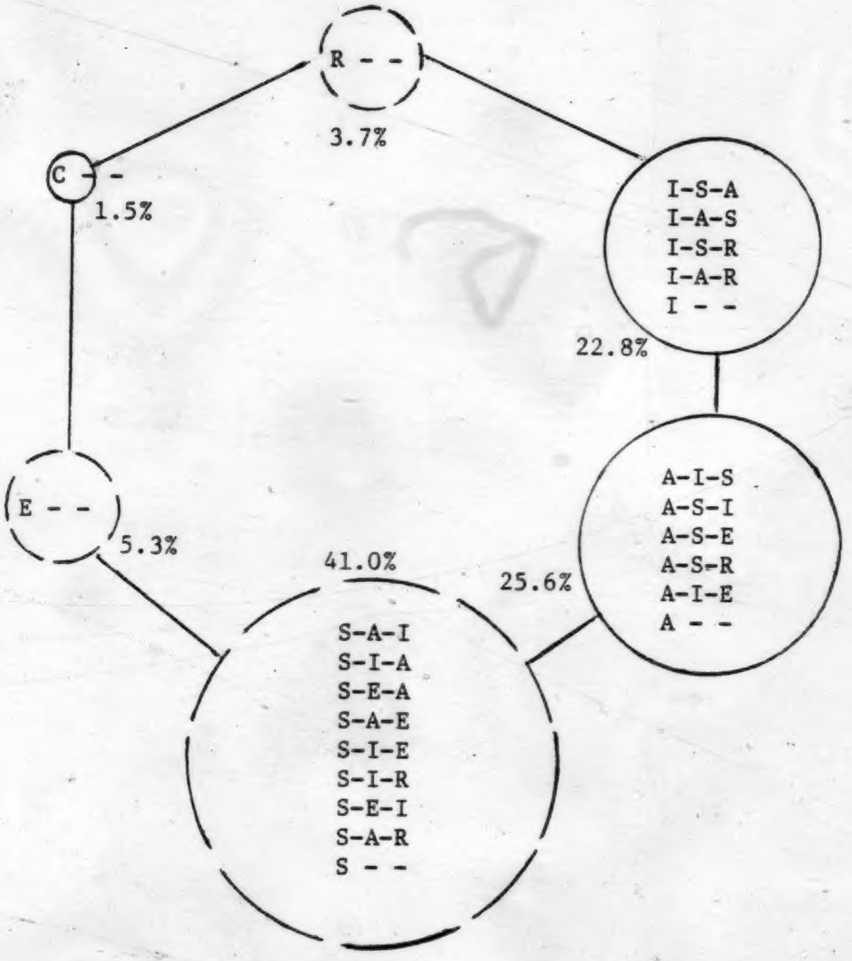

R - -
3.7%
C - -
1.5%
I-S-A
I-A-S
I-S-R
I-A-R
I - -
22.8%
A-I-S
A-S-I
A-S-E
A-S-R
A-I-E
A - -
25.6%
E - -
5.3%
41.0%
S-A-I
S-I-A
S-E-A
S-A-E
S-I-E
S-I-R
S-E-I
S-A-R
S - -

Figure represents distribution of assigned Holland Code (S-R-E) in occupational therapy (N=1400). Percentages are proportional to percent of respondents with that high point code. Broken circles represent expected codes. Three-letter codes within circles occurred >20 times.

Summary of Results

The results of this descriptive study were presented under each of the four research questions, followed by a short summary. This section serves as an overeview of the major findings.

Salience: When the total group (N=1400) is considered, the working and home/family roles receive the highest ratings on each of the salience scales of participation, commitment, and role value. Although respondents spend more time in the working role this is closely followed by the home/family role. The community service role receives the lowest rating across the three salience scales.

When the group is divided according to age the pattern of responses across the salience scales appears to be compatible with Super's stages of vocational maturation. As the age of the respondent group increases the level of participation, commitment and role value assigned to the home/family role gradually increases while that assigned to leisure decreases slightly. The level of importance assigned to working is closely aligned to the home/family role across all age groups and salience scales. The community service role gradually increases in importance for respondents over 30 years of age.

When the group is divided according to position level, the roles of working and home/family maintain their primary positions. Studying is the one role that approaches a similar level of importance and this only occurs in the faculty/researcher category (N=44). The community service role receives the lowest rating across all position levels and salience scales.

When educational level is used to subdivide the group, the working and home/family roles maintain their primary positions at each level. However, for those groups with graduate degrees participation in the studying role exceeds that for the home/family role. Respondents with graduate degrees report greater levels of commitment and role value for the studying role than those with undergraduate qualifications. A gradual increase in terms of role value and commitment to the community service and leisure roles is observed as the educational level increases.

Values: When the relative importance of the value scales for the total group (N=1400) is considered, personal development, social relations, ability utilization, altruism, autonomy, and achievement are the most important. Risk and physical prowess are of little importance to this group and receive the lowest rating. Whether the group is subdivided by age, position, or educational level, these values maintain their original level of importance.

Occupational therapy respondents appear to be a very homogeneous group in terms of their values. Little variation is noted across age groups. The level of importance reported for social interaction and physical activity appears to gradually decrease as age increases, while that assigned to authority gradually increases for those under 65 years. Creativity is of greatest importance to the small group of ≥ 65 years.

When the group is divided according to position level, the relative importance of authority gradually increases with the level of responsibility. Value scale patterns for the clinical supervisor/service leader and managerial levels are so similar that one category could have been used for these respondents. Those on leave or no longer working in the field generally reported lower value scale scores than those who had retired.

When educational level is used to divide the group the level of importance assigned to advancement gradually increases with the level of education and similar patterns are observed with authority, autonomy, and creativity. Economics and lifestyle continue to be important to respondents regardless of the educational level. Only at the doctoral level is personal development not rated as the most important value; here autonomy assumes that position.

Job Satisfaction: There appears to be a gradual increase in general satisfaction with age and with increasing levels of responsibility reflected within the position levels used in this descriptive study. Private practitioners and consultants (N=80) report slightly higher levels of general and extrinsic satisfaction than other groups engaged in active practice. Those on leave or no longer practicing (N=164) report lower levels of satisfaction than those who have retired (N=30) but do not differ appreciably from those in active practice on any of the satisfaction scales.

Holland Code: The issues surrounding the appropriate Holland Code for occupational therapy are far from clear. On the basis of the frequency of occurrence of three-letter codes within this sample of occupational therapists, the assigned code S-R-E is not appropriate. A Holland Code based upon the social, artistic, and intellectual scales would appear to be the most appropriate for this occupational group.

CHAPTER V

DISCUSSION

The major objective of this descriptive study was to develop a foundation for the study of career patterns in occupational therapy. To do this, a nationwide survey of occupational therapists who resided in Canada was undertaken. All therapists had completed their basic educational requirements and were registered with either their national or provincial occupational therapy association. It was estimated that this number (2267) represented the majority of the therapists in the country; 53% of that number responded, providing a sample of 1400. Each region of the country is represented by no less than 50% of the therapists registered throughout that area and on that basis the data from the present study provides an adequate foundation for further work.

In 1977 Maxwell and Maxwell completed the only national survey of occupational therapists (apart from manpower surveys) that has been published to date. That survey provided "a fairly definitive picture of the profession of occupational therapy at one point in time" (p. 15). Although the number of occupational therapists in Canada increased between 1977 (when the Maxwells surveyed a total of 1491 therapists) and 1984, a comparison of the demographic data for the two surveys shows some remarkable similarities.

Occupational therapy remains a female-dominated profession, the proportion of females in both surveys being 96%. It is also the same as that found in a recent report on occupational therapy manpower (Filuk & Opzoomer, 1984). Although the number of male respondents has doubled (26 in 1977 and 55 in 1984), males continue to represent under 5%.

There is a slight increase in the proportion of married respondents in the 1984 survey, 904 (65%) up from 500 (60%) in 1977, while the proportion of those who stated that they were no longer married substantially increased in 1984, 155 (11%) compared to 49 (6%) in 1977. This is compatible with the increase in marriage breakdown evident in the Canadian literature that was reported by Casserly and Cote (1980) and the greater diversity in living arrangements reported by Canadian Mental Health Association (1984).

The proportion of respondents in each of the position categories is similar in both studies. Staff therapists, the front line service personnel, still account for the majority of respondents. In the 1977 survey this group accounted for 59% (459) and in 1984 49% (684); this is likely a fair representation of the proportions of front line personnel in the general occupational therapy workforce. The diploma level qualification, which was the basic level of education for occupational therapists in Canada until 1978, effectively precluded graduate study for decades, thus ensuring that the vast majority of therapists would not be qualified to rise beyond a supervisory position within their own department or unit.

The private practitioner/consultant category was the only one to show a substantial increase since 1977 when this group (28) comprised 3.6% of the sample. In the 1984 survey there were 80 respondents in this position category (6%). This development likely reflects the growing number of employment opportunities for therapists in community-based programs, schools, and health units where they may provide services under contract, making it possible to work on a self-employed basis.

When educational level is considered, the proportion of respondents whose highest level of education was at the diploma level has decreased

(495, 63% in 1977 and 372, 27% in 1984) while those at the baccalaureate level increased by a similar amount (240, 31% in 1977 to 950, 68% in 1984). Since the baccalaureate degree became the basic level of education therapists have been returning to university in large numbers to upgrade their original qualifications, which likely accounts for the similar proportionate decrease at the diploma level and increase at the baccalaureate level.

The number of respondents with completed graduate degrees has also increased substantially (64 master's (5%) and 7 doctorates (<1%) in 1984, compared to 12 master's (1.5%) and no doctorates in 1977) but the majority of these advanced degrees were obtained in allied fields. Although this factor may also be related to the increase in the number of respondents in the private practitioner/consultant category, it also increases the probability of major changes in career focus in this allied health profession.

As Holland (1973, 1979, 1981) has pointed out, where the opportunity to implement the career choice that is most closely aligned to one's primary code is not possible, for example pursuing a graduate degree in occupational therapy at a Canadian university, other options may be sought. Holland hypothesized that opportunities will be sought to implement the secondary codes, in occupational therapy entering allied fields to obtain graduate education could be explained in this manner.

The similarity between the demographic data from the 1977 and 1984 surveys supports the use of the earlier study as a valid baseline for comparison in such areas as values, work salience, and job satisfaction. It also increases the probability that the data from the present study are representative of the Canadian population of occupational therapists.

This foundation for a career pattern study was undertaken by initially identifying the values, level of participation, commitment, and role value realization (work salience) assigned to the major life roles of studying, working, community service, home/family, and leisure.

Findings from this study indicate that these occupational therapists are a very homogenous group in terms of the values which they endorse and the pattern of work salience that they demonstrate. This supports Holland's (1973) perspective that those with like preferences, self perceptions, and values seek a common environment that will facilitate their expression. His contention that personal orientations are reasonably stable is strongly supported by the present study where only slight differences in values are noted across age and position categories. The conclusion drawn by Osipow (1983) following a survey of literature pertaining to the stability of occupational values in general is also supported by the present findings.

It is not possible, on the basis of data from this study alone, to comment extensively upon Super's developmental model in terms of the conception of life stages and developmental tasks. Actual career pattern data similar to that collected in an Alberta study (Madill, Brintnell, Stewin, Fitzsimmons & Macnab, 1984) is necessary for that purpose. However, Super's (1981) multidimensional model of work salience (participation, commitment, role value realization across five major activities) was particularly valuable in the present study and findings from this aspect of the national survey are applied to his developmental life stage model (Super, Crites, Hummel, Moser, Overstreet & Warnath, 1957) in the following discussion.

When the total sample (N=1400) is considered, the working role reflects the highest level on the participation scale and this is closely followed by the home/family and leisure roles. When the comparatively small group of respondents who are under 25 years of age (N=57) is considered, the working role remains in the primary position while participation in the leisure and studying roles is above that reported for the home/family role.

The task during the 22-24 year period has been described as "trial with little commitment". Here the first position, in what appears to be the appropriate vocational choice, has been accepted and the individual is in effect trying the new role on for size. Although the working role also maintains the primary role in terms of commitment and role value realization the leisure role provides the next role through which these therapists seek to implement their self concept. This observation could perhaps be interpreted as a reflection of provisional commitment where greater time is spent, and value placed upon, leisure pursuits. Although there is perhaps less responsibility at this stage in career development, this group of respondents also report that the studying role is an important activity. If this activity is also work-related it may imply a higher level of work role commitment and role value than Super suggests at this stage. However, within professional groups, where keeping up with clinical developments in the literature is essential, the level of importance reported here for the studying role is not likely to be unusual.

It is in the establishment phase, where consolidation and advancement are suggested to be the key tasks, that the largest group of respondents (N=1122, 80% of this sample) exist in the present study. The "trial commitment and stabilization" phase (25-30 years) has been described as a settling down period (Herr & Cramer, 1984) where a permanent position within the career choice is established.

The working role maintains its primary position in terms of participation and commitment. The home/family role rivals the leisure role in terms of participation, commitment, and role value for the second most important role through which these therapists seek to implement their self concept. A similar pattern exists for those in the next age group (31-44 years).

This phase is characterized as the period of "advancement". It reflects the most creative years where a superior performance is demonstrated and qualifications are improved (Herr & Cramer, 1984). With reference to the attainment of graduate degrees this is likely appropriate to the occupational therapy scene. The working role is of primary importance to this age group in terms of participation and it is closely followed by the home/family role. This group is most committed to their home/family role but seek to implement their role values primarily through the working role.

The maintenance phase (44-64 years) is described as a continuation of the established pattern (Herr & Cramer, 1984) and when the salience scale scores are reviewed for the corresponding group of respondents in the present study (N=212, 15%) this is definitely the case.

The results of the value scales are compatible with Super's life stage concept and some trends that appear to be related to age were observed in the present study. The relative importance of authority (telling others what to do) gradually increases as age increases, showing only a slight decline in the small group (N=9) of over 65 year olds. Three value scales showed a gradual decrease in their level of importance as age increased, advancement (to get ahead), social interaction (to do things with other people), and physical activity (to exercise a lot) which is compatible with the developmental tasks outlined by Herr and Cramer (1984) under the "establishment", "maintenance", and "decline" phases.

Super (1981) characterizes this series of life stages -- growth, exploration, establishment, maintenance, and decline -- as major cycles. Although the actual stages may not differ for men and women, the recycling process to which he refers may occur more frequently for women and this may in turn prolong the advancement and maintenance phases for females. If the women in this age group are typical of other working females, which they most likely are, the commitment and role value implemented through the home/family role constantly competes with the working role for priority throughout the establishment and maintenance periods. For those who reported being on leave or having left the profession (N=164, 12%), the mean level of participation, commitment, and role value reported for the home/family role exceeds that given to their other roles. However, high levels of commitment and role value in the home/family role are also reported by those who are between 25 and 45 years of age, and this level of endorsement is similar to that reported by those between 45 and 64 years.

The recycling process that is described by Super (1981) may not only reflect the unstable or multiple trial career patterns but it may also be a product of the competition between two major life roles which must be carried out within the same time span. The biological clock makes it necessary for women to produce children before they reach 45 and the career role demands the most effort and creativity at precisely the same period.

The theories of both Super (1981) and Holland (1973, 1981) make reference to the role that experience plays in career development. Experience is likely to clarify the individual's view of his assets and liabilities, and also serves to increase the level of knowledge about the opportunities and limitations of a job. Experience plays an important role in the decision to change jobs or change career focus.

The length of work experience is closely related to position level. Typically, the higher the educational level, the greater the level of responsibility, and the higher the position level the older the incumbent. The results of this study suggest that there is little change in the level of endorsement across the value scales in relation to age. When they are considered in relation to position level the six scales receiving the highest endorsement (personal development, social relations, ability utilization, achievement, altruism, and autonomy) ~~maintain~~ their primary level of importance across all positions. Only in the faculty member/researcher category is altruism not included, and here creativity surpasses it. As the level of responsibility increases there is a tendency for the level of endorsement of authority to gradually increase. No differences in terms of values are evident when front line and supervisory personnel are compared.

Although values have been found to change over a career (O'Toole, 1982) in this sample of occupational therapists very few age trends were observed. O'Toole has also suggested that work values may be determined more by experience than age. Some support for this concept was evident in relation to values and position level and it is also apparent in relation to educational level. Higher mean scores given by respondents with graduate as opposed to undergraduate qualifications to some values were noted. Autonomy, personal development, ability utilization, creativity, achievement, and lifestyle are all of greater importance and altruism is of lesser importance. Only when rated by those with graduate qualifications does the mean score for risk reach the level of "some importance".

Interpretation of the pattern of values for this sample of occupational therapists is difficult, for group sizes vary considerably, but there seem to be some conflicting elements. Personal development and ability utilization are very important values to this sample. These values may possibly be more important to all individuals who possess post secondary education and especially to those in the "helping professions", the social desirability factor possibly being a powerful influence on all such respondents. But occupational therapists also value autonomy and achievement highly, while advancement and risk receive considerably lower ratings. Autonomy in work related decision making could be expected to involve risk taking, and achievement to subsequent career advancement. Does the high value placed upon altruism, the process of helping others and being concerned about their welfare, assume such priority for occupational therapists that other values are overshadowed by the desire to help? The interrupted career pattern frequently results from the demands of yet another nurturing role, that of raising a family. Has this socially accepted female role function led these women to make such a traditional career choice? Do they differ markedly from the value patterns of other women? Most likely not, but by valuing altruism, personal development, and the home/family roles so highly, the incidence of the interrupted career pattern is likely extremely high. It is in fact so high that it contributes to manpower problems and increases the need for refresher education options, and it may have a negative effect upon promotion, a factor that may also have a very powerful negative influence upon the status of this allied health profession. Perhaps without realizing it therapists who choose the interrupted career option are indeed taking a major risk which is obscured from view by their search for an outlet for altruism and nurturance.

Only in the case of those with graduate degrees (which includes the faculty member/research category) does altruism not occur in the six most important values, and for this group advancement and risk are also more highly valued. This small proportion of respondents are likely some of the field's pioneers; the traditional elements of a female dominated conservative career pattern are not as evident in this group. This group has chosen different options from the majority, and these differences are also evident across their salience scale ratings.

Those with graduate degrees (master's N=64, doctorate N=7) participate most extensively in the working and studying roles. They are most committed to the working role and this is followed closely by two roles, home/family and studying. In terms of role value, working again assumes the first priority home/family and studying follow in that order.

This group is the only one in which the studying role assumes any great importance. Studying and working roles are closely aligned, in fact one role may be part of, or essential to, the other as the majority of those with graduate degrees occupy positions on the academic staff of Canada's leading universities. In Super's (1981b) developmental model, he proposed that "work provides a focus for personality organization for most men and many women" (p. 38). It is likely for this group of career oriented women that this is the case. Thus a small percentage of this large group of respondents appears to value their career role very highly and, therefore, may be more likely to demonstrate career patterns that resemble Super's (1978) description of the stable working career. Without actual career pattern data it is not possible to determine the manner in which members of this group have managed similar role demands to those in other position categories while attaining higher educational qualifications and subsequently positions of greater responsibility.

When job satisfaction is considered the findings from this study may be explained by Super (1981) and Holland (1973) and Lofquist and Dawis (1969, 1976). Super contends in Proposition 10 that work satisfaction and life satisfaction are dependent upon the extent to which an individual finds adequate outlets for their abilities, values, interests, and personality characteristics. Given the values endorsed by occupational therapists in this sample and the high level of work salience, the level of general and intrinsic satisfaction found in this study is perhaps lower than expected. The majority of respondents in Maxwell & Maxwell's 1977 survey were reported to be highly satisfied with their work and with their career choice. This is not the case with the present study, where respondents rate their level of general and extrinsic satisfaction between neither satisfied or dissatisfied and satisfied. This could be interepreted as Frese (1982) had suggested with the element of resigned job satisfaction a possible contributor.

However, there are some problems with the method Maxwell and Maxwell used to measure job satisfaction. Items from Herzberg's intrinsic and extrinsic scales were included within a larger survey; two questions out of 101 were devoted to job satisfaction and the results compared to "a cross-industry sample of the late sixties" (p. 31).

In terms of Super's (1981) eleventh proposition, which states that the degree of satisfaction people attain from work is proportionate to the degree to which they have been able to implement their self-concepts, occupational therapists in this sample could be considered to have successfully implemented their self-concepts through their career choice on the basis of the level of intrinsic satisfaction reported in the present study.

Holland proposed that members of an occupational group will respond to environmental demands in similar ways and that the level of satisfaction derived from their career choice will largely depend upon the congruence between the individual and the work environment. The intrinsic scale score ratings could be interpreted as Holland suggests -- that there is a high degree of congruence between these occupational therapists and the intrinsic aspects of their work environment.

In a similar manner, Lofquist and Dawis describe an essential element in job satisfaction; the degree of correspondence between the individual's needs and the set of reinforcers available from the work environment. They contend that when the reinforcers equal or exceed these needs, satisfaction results from work behavior. Satisfaction is an internal indicator, a subjective appraisal on the part of the worker. There is a high degree of correspondence between the occupational therapists in this sample and the intrinsic aspects of their work environment, but their levels of general and extrinsic satisfaction are not as high. Findings from this study do not address the other aspects of Lofquist and Dawis's model, that of satisfactoriness and the cycle proposed in the case of dissatisfaction.

The level of general satisfaction in this study gradually increases as age increases, a similar finding to that reported in the literature (Herr & Cramer, 1984). A similar trend is noted with intrinsic satisfaction and age. A parallel may also be drawn between the consistency of the highly endorsed value scales on the LRI and the high level of intrinsic satisfaction. Occupational therapists in this sample consistently endorsed intrinsic or instrumental values, personal development, social relations, ability utilization, altruism, autonomy, and achievement more highly than economics, lifestyle, and working conditions which may represent more extrinsic elements.

Findings in terms of the level of extrinsic satisfaction could be considered as being lower than those on the intrinsic scale. It could be interpreted that therapists in this sample are less satisfied with the extrinsic elements of their career choice and that such elements as supervision, institutional policies, and remuneration are sources of dissatisfaction for many. However, it may be that extrinsic elements are simply less important to them -- an interpretation supported by the values they endorse.

The findings from this study are generally supportive of Holland's theoretical perspective, in that members of this occupational group have similar personal orientations when their values are taken as the measure. However, when their vocational interest patterns are measured by the VPI the group varies considerably in terms of their Holland Codes. Holland's Occupational Finder lists occupational therapy as social-realistic-enterprising (S-R-E) and this was also the code used in the CCDO, but only two of the the 1400 respondents demonstrated an S-R-E code. In fact, a total of 106 Holland Codes were identified within this sample of occupational therapists.

In discussing the origins of the theory, Holland states that "Well defined people or work environments are most likely to exhibit characteristics attributed to their codes, whereas poorly defined types or environments are least likely to exhibit the expected characterics or influence" (Holland, 1979, p. 5). Occupational therapy is definitely not a well defined work environment but less homogeneity or consistency of results across other scales would seem necessary in order to interpret the code discrepancy as indicative of person/environment incongruence. To what extent the different Holland Codes cluster according to the position levels in this study has yet to be determined.

Holland has indicated that the primary code, represented by the first letter, is the most reliable and although codes may shift slightly from sample to sample, changes are infrequent. Here the present findings do not differ, the social scale remains in the primary position. However, he maintains that changes in the secondary codes, represented by the second and third letters, occur more frequently but mostly these shifts involve a reversal of the last two letters. In terms of the present findings, S-E-R only occured 18 times so that even when considered in combination with S-R-E the current Holland Code assigned to occupational therapy cannot be considererd to be accurate in Canada.

The whole issue of determining a Holland Code is far from clear. Holland recommends using raw scores as they have been found to have greater predictive validity for women than normed scores. The predictions from raw scores and normed scores differ because the means and standard deviations for women vary greatly from one summary scale to another (1979, p. 33). This could be interpreted as casting some doubt upon the validity of the use of the VPI with females. Women are more likely to obtain social, artistic and conventional codes while men are more likely to obtain realistic, investigative, and enterprising codes according to Holland. He relates this situation to the influence of cultural and societal expectations, a tendency which has, according to Fitzgerald and Crites (1980), systematically limited women's career choices and reinforced traditional female career patterns. This may be one possible explanation for the diversity of Holland Codes found in this study. Perhaps the interests of many respondents were originally in other areas, engineering or architecture for example, which are primarily male dominated. However, the final job choice was occupational therapy, one more closely aligned to the female stereotype.

When a Holland Code based upon the social, artistic, and intellectual scales is assigned to occupational therapy (S-A-I), and this code is compared with those assigned to other allied fields, then the social, artistic, and intellectual scales are well represented. The realistic and enterprising scales represented in the former code (S-R-E) appear very infrequently in allied areas. Although further support may be found for the S-A-I code by comparing Holland's descriptions of these personality types with the values endorsed by the respondents in this study, drawing parallels in this manner is insufficient evidence for validating the code. However, Holland's typology may also be used to estimate the range of personalities within an occupational group (Holland & Holland, 1977). Results of this attempt to replicate the assigned code indicate that the code for occupational therapy should be based upon the social, artistic, and intellectual scales.

If the diversity represented by the occurrence of a variety of Holland Codes could be interpreted as a valid estimate of the differences in occupational therapists in this sample then this could be used to explain the constant search for identity that is faced by the profession and represented throughout its literature on a world wide basis. However, the explanation is unlikely to be that simple when the homogeneity of this sample of occupational therapists in terms of their values and work salience patterns is also considered. On this basis, S-A-I can tentatively be identified as the Holland Code for occupational therapy.

CHAPTER VI

CONCLUSION

The present study was undertaken to develop a foundation for a career pattern study in occupational therapy and ultimately to provide some empirical data which may facilitate the formulation of a career development theory for women.

There are opposing views as to the need for or relevance of a career development theory for women. Holland (1977) vehemently opposes it; Osipow (1982) evades the issue; Super (1981, 1983) has expanded his theoretical perspective by incorporating a multidimensional model of role salience. His model is, therefore, the best equippped to deal with the major issues influencing women's employment. What appears to be needed is a theory of career development that is applicable to both sexes, one that can account for discontinuities regardless of their cause. Herr and Cramer (1984) suggest that the weighting of various factors according to gender, perhaps others according to age, race or socioeconomic status may have merit.

The findings from this study support Super's (1981a) theoretical position on the multidimensional model of work salience, although actual career pattern data would be necessary to confirm the life stages and the existence of the developmental tasks which likely occur within them. The working role for this large group of females is central in terms of participation, commitment, and role value, but the home/family role assumes the primary position in terms of commitment and role value to a very large extent. It is apparent, in this sample, that as age increased the importance of the home/family role increased, and this factor may serve to prolong the establishment and maintenance phases for females in general, not just occupational therapists.

The values endorsed by this large sample of occupational therapists are consistent across age groups and position levels which would imply that values are shared to a very large extent throughout this professional group. Where some differences are noted is in relation to educational level. It is yet to be established if this is a characteristic of this sample or a general factor that would influence value structures regardless of sex, race, or socioeconomic status.

It is also very possible that the values endorsed by this group of occupational therapists will be similar to those held by females in other traditional women's occupations -- nursing, teaching, social work, physical therapy and speech pathology. To what extent the values endorsed by these women are a product of the female socialization process before any professional socialization is undertaken raises some interesting issues for further study. The presence of graduate level education appears to be related to differences in the levels of endorsement across the value and salience scales and in some cases to their order of importance. This small group of respondents likely represents some of the field's pioneers who have chosen different options. They are employed primarily in university settings and show higher levels of endorsement for autonomy, advancement, creativity and risk-taking than those in other categories. Work plays a primary role for this group across the salience scales and as a result they could be considered to be the most career-oriented.

Occupational therapists are not highly satisfied with their career choice as evidenced by their level of general satisfaction. Intrinsic elements account for a greater source of satisfaction than extrinsic factors and on this basis it is likely that the latter would be a major contributor to decisions to change career focus.

In relation to the intrinsic elements, the findings from this study could be explained by some aspects of Holland's (1973) and Loftquist and Dawis's (1969) theoretical positions, that of person/environment congruence or correspondence. However, on the issue of Holland's typology these data do not support the use of existing Holland Code. The greatest diversity amongst the respondents in this sample of occupational therapists is noted in their vocational interest patterns. Further complicating the issue is the fact that the precise method of deriving a Holland Code for an occupational group was not able to be determined from the literature. However, a Holland Code based upon the social, artistic and intellectual scales appears to be the most appropriate for occupational therapy in Canada. Over-dependence upon average profiles as outlined in the CCDO may have served to reduce the range of personalities within some occupational groups, or discourage the recruitment of atypical prospects (Holland & Holland, 1977) as opposed to Maxwell and Maxwell's 1984 interpretation that "academic programs ....actually socialize out leadership aspirations or skills" (p. 353) in occupational therapy students. Individuals who highly endorse the enterprising and intellectual scales may in fact be encouraged to enter other fields by vocational guidance personnel prior to their entry to university.

Recommendations for Further Research

A large amount of data has been accessed for this descriptive study, with the primary purpose of creating a data base as a foundation for a career pattern study. With the representation of no less than 50%

of the occupational therapists who reside in each region of the country, a career pattern study could be undertaken using a representative sample. A similar method to the one employed in the preliminary study could be used by regionally based interview teams.

A series of other studies is also planned:

1. Profiles of occupational therapy under each position level in terms of the distribution of age, education, level of job satisfaction, and vocational interest patterns (as represented by Holland Codes) have yet to be completed and similar information is needed across the areas of specialization represented in this sample. This type of data analysis would be of use to the Canadian Association of Occupational Therapists in terms of that organization's manpower data base.

2. Further analysis of the vocational interest patterns from this sample of occupational therapists is necessary in order to determine the relationship between the Holland Code identified in this sample of occupational therapists and their level of competency, satisfaction, and duration of job tenure.

3. On the basis of the data presented in this study a good profile of 50% of the sample has been developed, but what about the other 50%? Twenty-five percent of this group endorse the value scales very highly; they participate in, are committed to, and seek to implement their role values between 3.0 and 4.0. The other 25% represents the other end of the continuum. It has yet to be determined how these groups are defined on the basis of their life roles.

4. A similar study, but preferably on a smaller basis, should be undertaken with representative samples from allied professional areas: physical therapy, speech pathology and audiology, psychology, and social work for example.

5. Little is known about the performance of occupational therapy students or those from allied professional areas on the LRI and it is yet to be determined whether comparative data may be of use in the selection process. Entrance to basic educational programs in the rehabilitation field is restricted by quotas across Canada, making it necessary to develop and maintain a selection process that is based as far as possible on empirical evidence.

6. Based on the assumption that values are the essential, powerful determiners of vocational maturity, they would influence the way in which the self-concept is implemented through career choice and role value realization. Do the profiles of occupational therapists from this sample who were born, educated, and raised outside of Canada differ from those who are Canadians by birth? Data is available on the 318 respondents in this study who are in the landed immigrant/permanent resident category to investigate initially this question.

7. Regional differences are frequently referred to when professional issues are discussed on a national basis. Data relating to values and work salience can be reviewed in relation to region of practice, which may help to separate myth from reality.

Through this large descriptive study a foundation for an investigation into career patterns in occupational therapy on a national level has been developed. The basis for a series of related projects has been developed, and these have been outlined above. The information gained from the present study is also relevant to vocational guidance personnel and their interpretation of test results from instruments using Holland Codes. A reduction in the use of average profiles in vocational counseling is recommended on the basis of these results.

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APPENDIX A

Canadian Association of Occupational Therapists
Definition of Occupational Therapy

Occupational therapy is the art and science which utilizes the analysis and application of activities specifically related to occupational performance in the areas of self-care, productivity and leisure. Through assessment, interpretation, and intervention, occupational therapists address problems impeding functional or adaptive behaviour in persons whose occupational performance is impaired by illness or injury, emotional disorder, developmental disorder, social disadvantage, or the aging process. The purpose is to prevent disability; and to promote, maintain or restore occupational performance, health and spiritual well-being. Furthermore, occupational therapy services can be directed through health, educational and social services systems.

APPENDIX B

DEFINITIONS OF THE SUB-SCALES OF THE LIFE ROLES INVENTORY - VALUES SCALES

Subscale title		Definition
ABILITY UTILIZATION	-	to use one's skills and knowledge
ACHIEVEMENT	-	to have results which show one has done well
ADVANCEMENT	-	to get ahead
AESTHETICS	-	adding to and enjoying the beauty of processes, products and surroundings, both natural and man-made.
ALTRUISM	-	helping others and being concerned for their welfare
AUTHORITY	-	telling others what to do
AUTONOMY	-	to act on one's own
CREATIVITY	-	to be creative
ECONOMICS	-	to have a high standard of living
LIFE STYLE	-	to live according to one's own ideas
PERSONAL DEVELOPMENT	-	to develop as a person
PHYSICAL ACTIVITY	-	to exercise a lot
PRESTIGE	-	to be admired and recognized
RISK	-	to be able to take risks
SOCIAL INTERACTION	-	to do things with other people
SOCIAL RELATIONS	-	to be with friends
VARIETY	-	to have changing activities or conditions
WORKING CONDITIONS	-	to have a good work setting, good treatment, and associates
CULTURAL IDENTITY	-	to be accepted as a member of one's race, religion or ethnic group
PHYSICAL-PROWESS	-	to work hard and use one's strength

Sample LRI Items

VALUES

For each of the following statements, indicate how important it is to you. 1 - little or no importance; 2 - some importance; 3 - important; 4 - very important.

It is now or will be important for me to. . .
1. use all my skills and knowledge
2. obtains results which show that I have done well

PARTICIPATION (what you actually do or have done recently)

1 - never or rarely; 2 - sometimes; 3 - often; 4 - always or almost always

A. I have spent or do spend time in. . .
   1. studying
   2. working
   3. community service
   4. home and family
   5. leisure activities

F. I have been or am active in an organization that has to do with. . .
   26. studying
   27. working
   28. community service
   29. home and family
   30. leisure activities

COMMITMENT (how you feel about it)

Use the same scale of 1 to 4 to show how you feel about each of the activities in the Questions A to J.
1 - little or none; 2 - some; 3 - quite a lot; 4 - a great deal

A. It is or will be important to me to be good in. . .
   1. studying
   2. working
   3. community service
   4. home and family
   5. leisure activities

F. I am or will be proud to do well in. . .
   26. studying
   27. working
   28. community service
   29. home and family
   30. leisure activities

ROLE VALUES GRID

In this section, you will be asked questions which may sound like those you have already answered. However, here your answers will show what values you seek in each of the five major life roles: studying, working, community service, home and family and leisure activities. What you value may often differ in each activity.

Please read each statement carefully and then use the following scale to show how much opportunity you see to find each value in each activity. Very occasionally, you may feel that a value does not apply to a particular activity. When this happens, fill in the circle "NA" or "Not Applicable".

1 - little or none; 2 - some; 3 - quite a lot; 4 - a great deal

What opportunity do you see now or in the future to. . .

A. use all my skills and knowledge in. . .
   1. studying
   2. working
   3. community service
   4. home and family
   5. leisure activities

H. have the following be part of my way of life. . .
   36. studying
   37. working
   38. community service
   39. home and family
   40. leisure activities

APPENDIX C

Twenty Items of Minnesota Satisfaction Questionnaire

1. Ability utilization: The chance to do something that makes use of my abilities.

2. Achievement: The feeling of accomplishment I get from the job.

3. Activity: Being able to keep busy all the time.

4. Advancement: The chances for advancement on this job.

5. Authority: The chance to tell other people what to do.

6. Company policies and practices: The way the company policies are put into practice.

7. Compensation: My pay and the amount of work I do.

8. Co-workers: The way my co-workers get along with each other.

9. Creativity: The chance to try my own methods of doing the job.

10. Independence: The chance to work alone on the job.

11. Moral values: Being able to do things that don't go against my conscience.

12. Recognition: The praise I get for doing a good job.

13. Responsibility: The freedom to use my own judgement.

14. Security: The way my job provides for steady employment.

15. Social service: The chance to do things for other people.

16. Social status: The chance to be "somebody" in the community.

17. Supervision-human relations: The way my boss handles his men.

18. Supervision-technical: The competence of my supervisor in making decisions.

19. Variety: The chance to do different things from time to time.

20. Working conditions: The working conditions.

The short-form MSQ is composed of the twenty items listed above. The directions for this form are identical to those for the long-form. The short-form MSQ consists of three scales: Intrinsic Satisfaction, Extrinsic Satisfaction, and General Satisfaction.